

THE KEE. 474

25.87

THE GARDEN OF E D E N.

OR,

*An accurate Description of
all Flowers and Fruits now
growing in England, with par-
ticular Rules how to advance
their Nature and Growth, as
well in Seeds and Herbs, as
the secret ordering of Trees
and Plants.*

By that learned and great
Observer,
Sir HUGH PLAT, Knight.

The Fifth Edition.

L O N D O N,

Printed for William Leake, at the
Crown in Fleetstreet betwixt the
two Temple Gates.

1660.

1809:17



TO THE
HONOURABLE
and most perfect
Gentleman,

FRANCIS FINCH *junior*,
of the Inner Temple,
Esquire.

SIR,

You may please
to pardon my
forward in-
scribing this Book to
your name. Were it a
a 2 Work

Work of mine own composition, I should have thought on a meaner Patron. But the memory of that learned Knight the Author (to whom I had so near alliance) may excuse this presumption. He was a great searcher after all sorts of Knowledge, and as great a lover of it in all others. And I

bum-

bumbly conceiv'd I
could not doe him a
higher service th.m by
placing his Book under
your Protection, who
are not more honour'd
by those many Noble
Families whence you
are descended, than by
that large Portion of
Learning and Ver-
tue which have so
enriched your Noble
mind; and rendred you

a 3 pre-

precious to all that
know you. I hope that
Candor and sweetnesse
which accompanies all
your Actions, will also
shew it self in accepta-
tion of this Offering
from him who is ambi-
tious of no other title
than

SIR,
The most humble and
most devoted of all
those that honour

you

CHARLES BELLINGHAM.



The PUBLISHER

To the Reader.



Shall not blush
to tell you, I
had some am-
bition to pub-
lish this Book,
as well to do

right to the learned Authour
(my ever honoured Kins-
man) as to check their for-
wardnesse who were ready
to violate so useful a Work.
There are some men (of
great name in the world)
who made use of this *Author*,
and

and it had been civil to have mentioned his name who held forth a candle to light them to their desires; but this is an unthankful age. And whatever you may think of this small Piece, it cost the *Author* many yeares search, and no small expence, there being not extant (in our language) any work of this Subject so necessary and so brief. He had consultation with all Gentlemen, Scholars, nay not a Gardiner in *England* (of any note) but made use of his Discoveries, and confirmed his *inventions* by their own *Experience*. And whatever they discovered (such was his modesty) he freely acknowledges by naming the Authors, sometimes in words at length

length, as Mr. Hill, Mr. Taverner, Mr. Pointer, M. Colborn, M. Melinus, M. Simson, and sometimes by T. T. A P, &c. What ever is his own hath no name at all, unlesse sometimes (and that not often) he add *H.P.* at the end of the Paragraph. And when he refers you to some other part of the Book, 'tis according to the *Number or Section*, not the *Page*, for that onely serves for the *Table*. He wrote other pieces of *Natural Philosophy*, whereunto he subjoyned an excellent Abstract of *Cornelius Agrippa de Occulta Philosophia*; but they fell into ill hands, and worrie times. As for this Collection of *Flowers* and *Fruits*, I would say (if I had not so near Relation to it) that

that no *English man* that hath
a *Garden* or *Orchard* can hand-
somely be without it, but at
least by having it, will finde a
large benefit, And all *Ladies*
and *Gentlemen* by reading
these few leaves may not on-
ly advance their knowledge
and observation when they
walk into a *Garden*, but
discourse more skilfully of
any *Flower*, *Plant*, or *Fruit*
than the *Gardiner* himselfe,
who (in a manner) growes
there night and day, *Farewell.*

C. B.

*The Authors Epistle
To all Gentlemen ,
Ladies, and all others
delighting in Gods
Vegetable Creatures.*



*Aving out of
mine own expe-
rience, as also by
long conference
with divers Gen-
tlemen of the
best skill and practice, in the
altering, multiplying, enlarging,
planting, and transplanting of
sundry sorts of Fruits & Flow-
ers, at length obtained a pretty
volume of experim:ntal obser-
vations in this kind: And not
knowing*

knowing the length of my daies,
nay, assuredly knowing that they
are drawing to their period, I am
willing to unfold my Napkin,
and deliver my poor talent a-
bread, to the profit of some, who
by their manual works, may
gain a greater imployement than
heretofore in their usual callings:
and to the pleasuring of others,
who delight to see a rarity spring
out of their own labors, and pro-
voke Nature to play, and shew
some of her pleasing varieties,
when she hath met with a bir-
ing workman.

I hope, so as I bring substanti-
al and approved matter with
me, shoulde leave method at this
time to Schoolmen, who have al-
ready written many large and
methodical volumes of this sub-
ject (whose labours have greatly
fur-

furnished our Studies and Libraries but little or nothing altered or graced our Gardens and Orchards) that you will accept my skill, in such a habit and form as I shall think most fit and appropriate for it; and give me leave rather to write briefly and confusedly, with those that seek out the practical and operative part of Nature, whereunto but a few in many ages have attained, when formally and largely to imitate her Theorists, of whom each age affordeth great store and plenty.

And though amongst these two hundred experiments, there happen a few to fail under the workmans hand (which yet may be the Operators mistake, not mine) yet seeing they are such as carry both good sense and probability

bility with them, I hope in your courtesy I shall find you willing to excuse so small a number, because I doubt not, but to give goo^t satisfaction in the rest.

And let not the concealing, or rather the figurative describing of my last and principal secret, withdraw your good and thankful acceptance, from all that go before; on which I have bestowed the plainest and most familiar phrase that I can: for, Jo. Baptista Porta himself, that gallant and glorious Italian, without craving any leave or pardon, is bold to set down in his Magia naturalis, amongst many other conclusions of Art and Nature, four of his secret skils, (viz. concerning the secret killing of men the precipitation of salt out of sea-water, the multiplying of

Corne

corn two hundredfold, which else-
where I have discovered: & the
puffing up of a little past, to the
bignesse of a foot-ball) in an ob-
scure and Ænigmatical phrase.
And I make no question, but that
if he had known this part of ve-
getable Philosopby, he would
have penned the same as a
Sphinx, & roled it up in themost
cloudy & darksome speech that
he could possibly have devised.

This Author, I say, hath em-
boldened me, and some Writers
of more worth and higher reach
then himself, have also charged
me, not to disperse or divulgate
a secret of this nature, to the
common and vulgar eye or eare
of the world.

And thus having acquainted
you with my long, costly, and la-
borious Collections, not written
at

at adventure, or by an imaginary conceit in a Scholars private study, but writing out of the earth by the painful hand of experience: and having also given you a touch of Nature, whom no man as yet ever durst send naked into the world without her veile; and expecting, by your good entertainment of these, some encouragement for higher and deeper discoveries hereafter, I leave you to the God of Nature, from whom all the true light of Nature proceedeth.

H.P. Knight.

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THE
GARDEN OF
EDEN.

OR,

A briefe Description of
all sorts of *Fruits & Flowers*,
with meanes how to ad-
vance their nature and
growth in *England*.



Shall not trouble
the Reader with
anycurious rules
for shaping and
fashioning of a *Garden* or
Orchard; how long, broad, or
high, the Beds, Hedges, or
Borders should be contrived;
For every man may dispose
it as his House or quantity
of ground requires. And (to
deale

deale freely) I long on such work as things of more facility than what I now am abour. Every Drawer or Embroiderer, nay (almost) each Dancing Master may pretend to such niceties ; in regard they call for very small Invention, and lesse learning. I shall therefore speake to that which common searchers passe over, or never aimed at, being somewhat above their reach, who neglect the cause of what they find effected. Yet I shall begin with the ground, soile, or earth it selfe, as the Foundation of all ; still confessing what light or assistance I had from those who employed their hours this way as well as my self.

2. Break

2. Break up your ground, and dung it at Michaelmas. In January turn your ground three or four times, to mingle your dung and earch the better, rooting up the weeds at every time. Proved by Mr. T.T.

Tempering the ground.

3. In winter time, if you cover the ground which you meane to break up in the Spring, with good store of Fern, it keepeth down grasse and weeds from springing up in winter, which would spend some part of the heat of the ground, and it doth also inrich the ground very much, for all manner of Roots and hearbs. By Mr. And. Hill. Ashes of Fern are excellent.

Fern to enrich ground.

4. *Quere*, of enriching
B ground

Soot to enrich ground.

ground with Soot, which Mr. *Stntfield* (that married my Lord *North's* Brothers Daughter) assured me to have found true in pasture grounds, the same onely strewed thinly over.

Shavings
of horn
to enrich
ground.

Onions &
Bay-salt.

Age of
seeds.

Hearbs
with great
heads.

5. Shavings of Horne strewed upon the ground, or first rotted in earth, and (after) that earth spread upon the ground, maketh a Garden ground very rich. *Probatum at Bishops Hall*, By H. P.

6. Onions and Baysalt sown together, have prospered exceeding well.

7. The surest way to have your seeds to grow, is to sow such as are not above one year old, T. T.

8. If hearbs be nipped with the fingers, or clipped, they will

which
married
brothers
me to
pasture
only

strew-
or first
after)
on the
Garden
obatum
P.

sowen
ed ex-

o have
is to
e one
with
, they
will

will grow to have great
heads. T. T.

Choice of
seeds.

9. Chuse such seeds as be
heavy, and white within, T. T.

Dung for
potheards.

10. Swines and Pidgeons
dung are good for potheards,
and sifted ashes laid about
them, killeth snails, T. T.

To kill
Snailes.

11. If you would have Gar-
lick, parsnep, radish, turnep,
carot, &c. to have a large
root, tread down the tops
often, else the sap will run
into the leaves, T. T.

Roots
made
large.

12. Take the cutting of a
Vine from a branch that
spreadeth most in the midst
of the Tree, and not from
the lowest nor the highest
branch, having five or six
joynts from the old stock,
and it would be a cubit
long or more: plant it in

Chusing of
a Vine
cutting.

B 2 Octob.

Vine whē
to plant.

Young
Vines to
proin.

Bayes to
plant.

Eldern to
plant.

Leeks to
to grow
great.

Octob. or March. T. T.

13. Proine not your young
Vines untill they have had
three years growth. T. T.

14 Every slip of a Bay tree
will grow; strip off the great
leaves, and set them in
March when the sap begin-
neth to rise. T.T.

15. Every plant of an El-
dern will grow. T.T.

16. First, put some good
fat dung into water, and
therein water your Leekes
one night, and make your
beds of good fat dung, that
the dung may be a foot at
the least in depth: then co-
ver the bed with Fern, and
set the Leekes with a great
planting stick, and fill not
the holes with earth, but
water them once in two
dayes

dayes and no more; after this manner of setting I have seen Leekes as great as the stemme of a spade. T.T.

17. Sow Lettice in August for Winter. T.T.

18. After the Lettice is all blowen, and some of the bolles begin to beare a white poff, then cut off the whole great stem, and lay it a drying in the sun: and when it is dry, beat it up and down with thy fist upon a board, and put altogether in a dish, and blow away softly all the dust. T.T. And if you sow or set your lettice in the shide, they will be very great.

19. When it hath bolles, cut it up, and lay all the hearb to dry in the shadow, then beat it out. T.T.

Lettice to sowe.

Lettice feed how to gathe.

Lettice to grow great.

Purflane feed to ga-ther.

Wood
Strawber-
ries into
Gardens.

Watering
of straw-
berries.

Roses
grafted
upon what
stock.

Pompions
to grow
great.

20. Strawberries which grow in woods, prosper best in Gardens: and if you will transplant them forth of one Garden into another, then enrich the last ground by watering the same either with Sheeps dung, or Pidgeons dung infused in water; by Master *Hill*.

21. The muske and yellow Rose, and all those double and centiple Roses, may well be grafted in the bud upon the Sweet-brier. By Mr. *Hill*.

22. If you would have Pompions to grow exceeding great, first plant them in a rich mold, then transplant those sets into other fat mold, watering them now and then with the wa-
ter

ter wherein. Pidgeons dung hath been infused, then take away all the hang-bies, maintaining only one or two main runners at the most, and so you shall have them grow to an huge big-nesse. Proved by Mr. Hill. You must nip off these side branches about blossoming time, with their flowers and fruits; and take heed you hurt not the heads of the main runners, for then your pomptions will prove but dwindlings.

23. In winter time raise little hills about your Artichokes close to the leaves, because they are tender; and if any extream frosts should happen, they might

Arti-
chokes
from
frost.
See this in
Numb.
26. 58.

B 4 other-

otherwise be in danger to perish.

Musk-rose
to beare
late.

23. If you cut away the old branches of a Muske-rose, leaving onely the shooes of the next year to bear ; these shooes will bring forth musk-roses the next year , but after all other musk-rose trees. By Mr. Hill.

Roots in
their best
strength.

25. The roots of every tree and plant , are most full of sap when their tops or heads are most green and flourishing : and when the bark of the Tree will pill and loosen from the body , then will the rind also loosen from the root ; and when the tops begin to wither or stand at a stay , then do the rootes likewise.

And

And therefore that common opinion, that rootes are best and of most force in Winter, is erroneous. So as if I should gather any roots, for the use of Physick or Surgery, I would gather them either at their first putting forth of leaves, or else between their first springing, and the springing up of their branches, when they begin to encline towards their flowring. By A. H.

26. If every evening you lay a great colewort or cabbage leaf upon the top of every Artichoke, this will defend the apple from the violence of the frost. By Goodman the Gardiner.

27. A branch of Box or Rose-

Arti-
chokes
from
frost.

23. 58. 1

Flowers
or leaves
gilded and
growing.

Quare, of
Ilinglasse
dissolved.

Flowers
candied as
they grow

Rosemary will carry their leaves gilded a long time fair, notwithstanding the violence of rain, if you first moisten the leaves with the gum of Mastick, first dissolved in a hard egge according to art, and leafe-gold presently laid thereon. Do this in a Summers day, when all the dew is ascended, and when the Sun being hot, may presently harden the Mastick, and so bind down the gold fast unto it. Quare, if Myrrhe and Benjamin will not do the like, dissolved as before.

28. Make gum-water as strong as for Inke, but make it with Rose-water; then wet any growing flower therewith, about ten of the clock

clock in a hot Summers day, and when the Sun shineth bright, bending the flower so as you may dip it all over therein, and then shake the flower well; or else you may wet the flower with a soft callaver pen-sil, then strew the fine searced powder of double refined sugar upon it: do this with a little box or searce, whose bottom consisteth of an open lawn, and having also a cover on the top, holding a paper under each flower, to receive the sugar that falleth by: and in three houres it will candy, or harden upon it; and so you may bid your friends after dinner to a growing banquet: or else you may cut off these flowers

ers so prepared, and dry them after in dishes two or three dayes in the sun, or by a fire, or in a stove; and so they will last six or eight weeks, happily longer, if they be kept in a place where the gum may not relent. You may do this also in Balme, Sage, or Borage, as they grow.

29. I hold it for a most delicate and pleasing thing to have a fair Gallery, great Chamber or other lodging, that openeth fully upon the East or West sun, to be inwardly garnished with sweet Hearbs and Flowers, yea and Fruit if it were possible. For the performance whereof, I have thought of these courses following.

First

A Garden
within
doors.

First, you may have faire sweet marjerom, basil, carnation, or rose-mary pots, &c. to stand loosely upon faire shelves, which pots you may let down at your pleasure in apt frames with a pulley from your Chamber window into your Garden, or you may place them upon shelves made without the room, there to receive the warme sun, or temperate rain at your pleasure, now and then when you see cause. In every window you may make square frames either of lead or of boards, well pitched within: fill them with some rich earth, and plant such flowers or hearbs therein as you like best; if hearbs, you may

may keep them in the shape of green borders, or other forms. And if you plant them with Rosemary, you may maintain the same running up the transumes and movels of your windowes. And in the shady places of the room, you may prove if such shady plants as do grow abroad out of the Sun, will not also grow there: as sweet Bryars, Bayes, Germander, &c. But you must often set open your Casements, especially in the day time, which would be also many in number; because flowers delight and prosper best in the open aire. You may also hang in the roof, and about the sides of this room, small pom-

pom pions or Cowcumbers, pricked full of Barley, first making holes for the Barley (quare, what other seeds or flowers will grow in them) and these will be overgrown with green spires, so as the Pompion or Cowcumber will not appear. And these are *Italian* fancies hung up in their rooms to keep the flies from their Pictures: in Summer time, your chimney may be trimmed with a fine bank of moss, which may be wrought in works: being placed in earth, or with Orpin, or the white flower called *Everlasting*. And at either end, and in the middest place one of your flower or Rosemary pots, which you may

Barley
growing
without
earth.

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Barly
growing
without
earth.

may once a week, or once every fortnight, expose now and then to the sunne and rain, if they will not grow by watering them with raine-water; or else, from platformes of lead over your windows, rain may descend by small pipes, and so be conveyed to the roots of your hearbs or flowers that grow in your windowes. These pipes would have holes in the sides, for so much of them as is within the earth, and also holes in the bottome, to let out the water when you please in great showers. And if you back the borders growing in your windowes with loose frames to take off and on, within the inside

inside of your windows, the Sun will reflect very strongly from them upon your flowers and hearbs. You may also plant Vines without the walls, which being let in at some quarrels, may run about the sides of your windows, and all over the sealing of your rooms. So may you do with Apricot trees, or other Plum trees, spreading them against the sides of your windowes. I would have all the pots wherein any hearbs or flowers are planted, to have large loose squares in the sides; and the bottoms so made, as they might be taken out at ones pleasure, and fastned by little holes with wiers unto their pots,

C there

Pots for
flowers of
a good fa-
shion. See
this also
Num. 56.

thereby to give fresh earth when need is to the roots, and to remove the old and spent earth, and so in your windowes: See more of this in *Numb. 30.*

Roses or
Carnati-
ons in
winter.

30. To have Roses or Carnations growing in Winter, place them in a Room that may some way be kept warm, either with a dry fire, or with the steam of hot water conveyed by a pipe fastened to the cover of a pot, that is kept seeing over some idle fire, now and then exposing them in a warm day, from twelve to two, in the Sun, or to the rain if it happen to rain; or if it rain not in convenient time, set your pots having holes in the bot-

bottom in pans of rain water, and so moisten the roots.

I have known Master Jacob of the Glassehouse to have Carnations all the winter by the benefit of a room that was neare his Glassehouse fire; and I my self, by nipping off the branches of Carnations when they began first to spire, and so preventing the first bearing, have had flowers in Lent, by keeping the pots all night in a close room, and exposing them to the Sun in the day time, out at the windowes, when the wether was temperate: this may be added to the Garden (mentioned Nu. 29.) to grace it in winter, if the roome stand conveniently

for the purpose.

31. You shall oftentimes preserve the life of a Carnation or Gilliflower growing in a pot, that is almost dead and withered, by breaking out the bottom of the pot, and covering the pot in good earth, and also the old stalks that spring from the roots; but every third or fourth year, it is good to slip and new set them.

Reviving
of Carna-
tions.

Orchard
of dwarf
trees.

32. If you make an Orchard of dwarf-Trees, suffering none of them to grow above a yard high; then may you strain coarse Canvas over your Trees in the blooming time, especially in the nights and cold mornings, to defend them from the frosts: And this
Canvas

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Canvas being such as Painters use, may after be sold with the losse onely of a penny upon the ell. You may use it onely for Apricots, and such like rare fruit whose blossoms are tender; or else to backward them after they be knit, if you would have them to beare late when all other Trees of that kind have done bearing. In this dwarf Orchard I would have the walks between the Trees, either paved with brick, or gravelled, and the gravel born up with bricks, that the sunne might make a strong reflection upon the Trees, to make them bear the sooner. And to bring forth the better digested fruit, I

C 3 would

Vineyard
to plant.

would also have the plot so chosen out, that all easterly and northerly winds may be avoided by some defence. I would have it but a small Orchard; and if it were walled in, it were so much the better. Help this Orchard with the best artificial earths and waters that are. I think a Vineyard may thus be planted, to bring forth a full, rich, and ripe Grape: or if you could happen upon a square pit of a yard deep, whose banks are sloping, and whose earth have been philosophically prepared (as before Num. 10) and that your Trees were bound sloping to the sides of your Orchard, and backed with boards, or lead, for re-

reflexion, that so your trees would prosper and beare most excellent fruit: And to keep your Trees low, when your stock is at such height as you would have it, nip off all the green buds when they come first forth, which you find in the top of the Tree, with your fingers; and so, as often as any appeare in the top, nip them off, and so they will spread, but not grow tall; even as by nipping off the side buds onely, you may make your Tree to grow streight and tall, without spreading, till you see cause: And thus with your fingers onely, and without any toole, you may keep your young Trees growing in

Trees
growing
either
high or
low.

Early fruit

what form you please.

33. To have early fruit, you must have an especial care to plant or graffe such fruits, as are the earliest of all other, and then adde all artificial helps thereto.

Old trees
recovered.

34. Two quarts of Oxen-blood or Horse blood for want thereof, tempered with a hat full of Pidgeons dung, or so much as will make it up into a soft paste, is a most excellent substance to apply to the principal roots of any large tree, fastening the same about them, after the root of the Tree hath taken ayre a few dayes, first, by lying bare: and it will recover a Tree that is almost dead, and so likewise of a Vine. For this will

Vines re-
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will make a decaying Tree or Vine to put forth both blossoms and fruits afresh. This must be done to the Tree about the midst of *Februari*, but apply it to the Vine about the 3d or 4th of *March*. This is of *M. Nicholson Gardiner*.

35. Get a load or two of fresh Horse dung, such as is not above 8. or 10. dayes old, or not exceeding fourteen: lay it on a heap till it have gotten a great heat, and then make a bed thereof an ell long, and half a yard broad, and eighteen inches high, in some sunny place, treading every Lay down very hard as you lay it; then lay thereon three inches thick of fine black sifted

Ordering
of the
Musk-
Mellon.

sifted mold ; prick in at every three or four inches distance a Muske mellon seed, which hath first been steeped twenty four hours in Milk : prick the top of your bed full of little forks of wood appearing some four or five inches above ground ; upon these forks lay sticks, and upon the sticks so much straw in thicknesse, as may both keep out a reasonable shoure of rain, and also the sun, and likewise defend the cold (some strain canvas slopewise onely over their beds) let your seeds rest so untill they appeare above ground, which will commonly be in six or seven dayes. You must watch them carefully when they first

first appeare; for then you must give them an howers sunne in the morning, and another in the afternoon; then shall you have them shoot an inch and a halfe by the next morning; then strew more fine earth about each stalk of such plants as have shot highest, like a little hill to keep the Sun from the stalks: for if the Sunne catch them, they perish; and therefore you shall often see the leaves fresh, when the stalks wither. Heighten your hills, as you shall perceive the stalk to shoot higher and higher. The plants must remain till they have gotten four leaves, and then remove them, taking up earth and dung together

The shor-
est way is
to buy
plants and
set them.

gether carefully about every root: make a hole fit for every of them good ground, placing them (if the ground serve) upon an high slope bank, which lyeth aptly for the morning sunne, if you may; let this bank be covered with field sand two inches thick all over, except neare about the plants (this ripeneth and enlargeth the fruit greatly) then cover each plant with a sugar pot, gilliflower pot, or such like, having a hole in the bottom; or else prick in two sticks acrosse, archwise, and upon them lay some great leaves to keep your plants from rain, sunne and cold. After they have been planted a day or two, you

you may give them two hours sun in the morning, and two in the evening, to bring them forward; but, till they have stood 14. dayes, be sure to cover them from 12. to 4. in the afternoon every day, and all night long. These pots defend the cold, and keep out all worms from spoiling your plants; and therefore are much better than leaves. Note, that you must defend them in this manner in the day time, untill your plants have gotten leaves broad enough to cover their stalks and roots, from all injury of weather; and then may you leave them to the hot Sunne all the day long.

If there be cause, you must with rain-water, water them now and then, but not wetting the leaves. And if by any exceeding cold, or moisture, your plants do not shoot forward sufficiently, but seem to stand at a stay, then take some blood and pigeons dung tempered (as before in Num. 34.) apply the same to the roots of the young plant; leaving some earth betwixt the roots, and the same will make them to shoot out very speedily. Remember to plant three plants together in each place, being round, and a little deep, and of the bignesse of a round trencher. Now when they have shot out all their

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their joyns (which you shall perceive when you see a knot at the very end of the shoot, which is somewhat before the flowring time) then some do use to cover every knot , or joyns , with a spade or shovel full of fine and rich earth ; and thereby each knot will root , and put forth a new shooote (*quare* , of the same course in Pompions or Cowcumbers .) by means whereof you shall have great increase of Mellons .

When your Mellons are as big as Tennis Balls , then if you nip off at a joyns , all the shoots that are beyond them , the Mellons will grow exceeding great ; for then

Pompions
and Cow-
cumbers
multiplied

Mellons
to grow
great.

then the sap doth not run any more at waste. But some hold, that you shall have greater Mellons though not so many, if you suffer their shoots to runne on without earthing the knots; and then, when you see your Mellons of the bignesse of Tennis balls (as before) then nip off at a joyn, all the shoots that are beyond the Mellons, but meddle not with the chief runner. This of Mr. Nicholson Gardiner. Lay your young Mellons upon Ridge-tiles, to keep them from the ground, and for reflextion.

36. Make a high bank, slopewise like a penthouse, that openeth to the Sun, and is by some means defended

Early
straw-
berries.

fended from all hurtful winds: plant your Strawberries therein, and water them with the infusion of some apt dung, now and then, when the weather is dry.

37. Bow down the branches of Roses, having buds upon them, into a vessel of wood pitched, standing within the ground, to keep them long upon the stalk, or to prevent frosts if you see cause.

Roses to bear late, and from frost.

38. *Quere*, What Pigeons dung and bloud, applyed to the rootes of Roses, or Carnations, will do, in the forwarding of their bearing.

Early Ros-
es and Carnati-
ons.

39. Plant Roses, according to the manner set

Early
Roses.

D down

down for Strawberries, before (Num. 36.) to have them before all others.

Carots,
parsneps,
and Turneps kept long.

40. Make a Lay of sand, and a Lay of carot rootes, cutting away the topes close to the root, with some of the small ends of the carots; do this in October or Novemb. in dry weather: and about the last of December where there is no frost, unpack them again; and if you will then keep them longer, you must pare off the shooting at the upper end of the root, and then lay them in sand. This out of *Gardiners Kitchin-Garden*, printed 1599. So of Parsneps and Turneps.

Roses and
flowers
backward.

41. *Quare*, If binding the bark somewhat hard with

a

a packthred, or rather with Brawn-bands, will not keep roses, and other flowers and fruits, long from blowing, by staying the sap from rising.

Quære, of
doing thus
after the
rose is new
budded.

42. To have rootes pro-
sper and grow great, you
must trench your dung a-
bout the depth of your root
which you would sow,
and if the root once get into
the dung, then it forketh, and
gathereth *fibras*, whereas o-
therwise it will grow wholly
into a long, round, and
fair root, of Mr. *Andrew*
Hill.

Roots long
and great.

43. But if you desire to
multiply your seed, not
respecting the rootes, then
mix your dung first well
rotted with good mold,

Seeds to
multiply.

and therein sow your seeds and they will encrease much: so as for seeds the dung must lye in the top, and for rootes in the bottom. By Mr. *Andrew Hill.*

Large Ca-
rots, or
parsneps.

43. Gather your carot or parsnep seeds, &c. from the highest spiring branches, and out of some friends Garden, where you may be sure of the best; sow these seeds about March, or April: and at drawing time choose the fairest roots of all other; cut off their tops somewhat low, and set them againe, and then let them seed the next yeare; then take the seedes from the highest topes and sow them, and so shall you have most faire and large rootes.

This

This of Mr. Hunt, the good horseman.

44. Take off the tops as far as the green goeth, *viz.* till you come to the wood, from Carnations, Gilliflowers, &c. slit them upward thorough the nethermost joynt, thrusting bet.ween the joynts some fine searced earth, made first into pap; and with the same pap close the ends round about as big as a Walnut: make holes in your pots, and put in your tops so earthed; these do seldome or never faile. By Mistris Hill. Also, the old root is here preserved, and you may carry thele tops thus earthed 100. miles in a box, *Quare*, if this secret will not also extend

A new
planting
of Carna-
tions, wall-
flowers, &
stock gilli-
flowers.

Plants to
carry far.

to stock Gilliflowers, Wall-flowers, &c.

Branches
to root.

45. Cut off a bough from any tree; and two inches from the bottom, take away the bark round about, prick it into the ground, and it will grow. *Quare.*

To kill
Wormes.

46. In the end of February or March, wet the ground first, and about eight or nine of the clock at night, by candle-light, gather up all the Wormes in dishes, and so you may destroy them.

Richmold

47. A Rich mold for a Garden: See among the Trees. *Numb. 29.*

When to
set or sow.

48. Set or sow Kernels in November, Nuts in February, stones of fruit in March, all in the increase of

of the Moon.

49. *Quare*, Of grafting roses, the splicing way, and so of thyme, rosemary, hysope, &c. to be grafted in this manner, either one upon another, or grafting them upon the boughes or branches of trees, if happily they will take.

One plant upon another, or upon a tree.

50. Whether the colour, sent, or tast, may be altered in a Flower or Hearb, by Art, see the Title, *Trees and Plants*, Num. 90.

Colour, sent, or taste of a flower altered.

51. Instead of privy hedges about a quarter, I commend a Fence made with lath or sticks, thinly placed, and after graced with dwarf apple, and plumme Trees, spred abroad upon the stick.

Fence of fruit trees.

White-thorn hedge.

52. When you would have a strong and speedy White-thorne hedge about your garden, set your plant high and sloping, and not flat, after the common manner. Prick in the cuttings, with the slope side downward, that the raine may not get in between the Wood and the Bark. Weed these hedges twice every yeare, and as the sprowts do grow of some length, let them be platted or brayded upward from the ditch; defend them from Cattel with a dry or dead hedge.

Carnation seed together.

53. Let Carnations or Gilliflowers shed their leaves, and leave the cods standing upon the root till

till the end of October, *viz.*
so long as you may for the
danger of frost: then cut
off the stems with the pods
upon them; stick them up-
right in some dry place in
an upper roome, and so let
them rest untill the Spring,
then sow them. Your Carna-
tion seed will prove a faire
large pink, and bear in Carna-
tion time; by S.

54. Your Coleflower seed
will not ripen till Michael-
mas, or a week after; let it
stand so long or longer, if you
feare not frost, before you
gather the seeds, which grow
in yellow cups; and being
ripe, are also yellow them-
selves.

Be sure you gather the
cups before the seedes be
shed;

Coleflow-
er seed to
gather &
to plant.

Coleflow-
er to bear
late.

shed; but these seeds with their cups or cods in a box, but cover not the box, and keep the box in some place from the frost: prick them in about the full of the Moon in April, when cold weather is spent: remove them when they have gotten four leaves, and in the full of the Moon in any case. Remove some of them in several moneths, and so you may save them growing with Coleflowers till Christmas. Your ground cannot be too rich for them; the best removing is not till June and July, and those of least growth, are best to remove late, to beare in Winter. Cover each Coleflower in frosty weather,

ther, every night with two of their great leaves, fastned in two places, with two wooden pricks. Do this also in cold gloomy dayes, when the sun shineth not.

55. Graft the branches of Carnations the splicing way, as in small twigges of Trees, placing upon each branch a several coloured flower, but let the branches which you graft, be woody enough. By S.

Divers
carnations
in one
root.

56. Cause large Carnation pots to be made, *viz.* double in bignesse to the usual pots, let them have ranks of sloping holes, of the bignesse of ones finger, each rank one inch distant from another. Set in the midst of the pot a Carnation,

Stately
pots for
carnations
As before
Num. 29.

Birds,
beasts,
pyramides
&c. to
grow
speedily.

tion, or a Lilly, and in every of the holes, a plant of thyme or hyssop; keep the thyme or hyssop as it groweth, even with clipping, or in the forme of frets or borders, and set these pots upon faire pillars in your Garden, to make a beautiful shew. Also, you may either of stone or wood, make piramides, losinges, circles, pentagons, or any forme of beast or fowle, in wood, or burnt clay, full of slope holes (as before) in Gilliflower pots; these being planted with hearbes, will very speedily grow greene, according to the forme they are planted in: And in this manner may you in two yeares space, make a high

high pyramid of thyme, or rosemary. In hot weather they would be shaded with some strained canvas from the sun, * and watered now and then by some artificial meanes. Also, a fret or border may be cut out in wood or lead, and after placed in a Garden when the hysope or thyme sides are grown to some height to be let thorough the cuts, and alwayes after kept by clipping, according to the work of the border, or fret: let the earth settle well before you sow your seeds; water with an infusion of dung, or good earth, because otherwise the earth within your molds will spend, and then your plants will decay.

* See after
in Num. 84

Delicate
frets or
borders.

The wood
may be
laid in
some oyle
colour.

Earth
strength-
ned.

To sow
Anniseeds
in England

57. Sow English Anniseeds when the Moon is at the full in February, or any time between the full and the change: if frosts will not suffer you to take the full Moon, hatch them into the ground, with a rake stricken thick upon them: then strew new horse-dung thinly upon the ground, to defend the seedes from the frost. These will ripen about *Bartholomewtide*; then respecting the Moon as before, sow againe, and these seeds will be ripe sooner than those which were sown in February. These seeds will also come up well, being self-sown, only break up the ground about them when they begin

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58.
your A
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59.
Februa
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gin to ripen. That ground which you would sow in February, breake up about Michaelmas; let it lye and crumble all the Winter: then when you meane to sow, stir it up againe, that it may be mellow; for, the mellower the better. A black rich mellow ground is best, and they like well in a rich dunged ground: Proved by S.

58. Having well earthed your Artichocks, then strew upon them some fresh hors-dung, one inch in thicknesse, and so leave them all the winter: By 23.56.

59. Sow Onion seeds in February, within eight dayes after the full at the farthest (but the nearer the full

Arti-
chocks
frō frosts.

Oniō seed
ordered.

full, the better, so all will go to seed, or head, and not grow to scallions: after you have sowed them, cover them as you did your Annis seeds, before in *Num. 57.*
By S.

Early and
late Pea-
cods.

60. Sow the early Pease as near Midsommer as the Moon will suffer, if you would have them come about six weeks after Michaelmas: but if you would have them ripe in May, then sow them in the beginning of September, somewhat before or after, as the Moon will give you leave: at the full is good, or three dayes before the full, and till eight dayes after the full, is also good: these will be ripe in May.

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by S.

61

Make your holes about one
inch and a halfe deepe,
wherein you set your pease;
let the ground be rich, mello-
low, and ordered *as before*,
(numb. 57.) In Annis seeds,
beare them up with stickes,
as they do the Garden-pease;
cover them after they be set
with new horsdung about
halfe an inch thick all over;
and (if you may possibly)
plant them so, as that
they may be defended from
the North, and North-
east, by reason of some hedge
or wall. *Quare*, of cove-
ring them with unsleakt lime
powdered, after they have
been steeped in some apt li-
quor a convenient time;
by S.

61. Sow Coliander seeds
E in

Colianders
to sow.

in February, respecting the Moon as in Annis seedes, (Num. 57.) but they need no dunging: By S.

Sap of Briony, to gather.

62. In April make a deep overthwart cut or gash into a Briony root, taking away the earth first from it; put in a Goos-quil a little under the slit, sloping the quil at the end which you thrust into the root: but first make a hole with your knife to get in the quil, and so you may gather great store of the water of Briony, placing a Receiver under the quil; By S.

Roses to beare late.

63. Quare, If one may not prevent the early budding of the Rose, by cross-hacking the bark (as in trees to kill mosse, or to stay

stay their sap from rising.)

65. You may multiply many rootes from a province rose, and the double musk-rose, (*quare*, of Carnations) if you buy a grafted rose tree, that hath gotten many sprouts from the place graffed, and setting the root so as the body may lye sloping near the earth: then lay as many of the branches as you may conveniently into the earth, loosing every slip a little from the body, and pricking with an aule about the joyns that is next the slip, from whence many sprouts will issue. And thus may you have great store of Province roses without grafting in the bud,

Roses and carnations multiplied

because each of them standeth upon his owne roote; whereas the bud is maintained from one Roote, which also maintaineth many other branches. *By S. See before in numb. 53.*

Good
seeds to
know.

Seeds to
sprowt
speedily.

65. Put some of your seeds in a sawcer of faire water, set it a while upon a Chafingdish of Coales; and if they be good, they will sprowt in a short time, else not.

66. *Quere*, In what time seeds may be made to grow in earth, moystened with warme water now and then, and the same placed in a warmer roome, over a Fornace, with a small temperate heate under the same.

67. Re-

67. Remove a Plant of stock gilliflowers when it is a little woodded, and not too greene, and water it presently ; do this three dayes after the full, and remove it twice more before the change.. Do this in barren ground, and likewise three dayes after the new full Moone, remove againe ; and then remove once more before the change: Then at the third full Moon, *viz.* eight dayes after, remove againe, and set it in very rich ground, and this wil make it to bring forth a double flower ; but if your stock-gilliflowers once spindle, then you may not remove them. Also, you must shade your

Single
flowers
doubled.

Tulipee
double.Mifeltoe
to finde.

Mislechilde

plant with boughs for three or four dayes after the first removing; and so of Pinks, Roses, Daysies, Featherfew, &c. that grow single with long standing. In removing, breake not the least root. Make Tulipees double in this manner. Some think by cutting them at every full Moone before they beare, to make them at length to beare double.

Num. 71.

68. By sitting upon a hill late in an evening, near a Wood, in a few nights a fire-drake will appeare; marke where it lighteth, and there you shall finde an Oake with Mistletoe therein, at the Root whereof there is a Misle-childe, where-

whereof many strange things
are conceived. *Beati qui non
crediderunt.*

69. Gather your Grapes
at the full of the Moon, and
when they are full ripe, slip
each bunch from the stock
whereupon it grew, and
hang those bunches along
by beames, in the roofe of a
warme chamber, that doth
not open to the East, or to
the North, and these will
keepe plump and fresh till
our Lady day, or therea-
bout: or else with every
bunch, cut off some of the
stock whereupon the stalk
grew, and then hang up the
bunches. Both these wayes
be true; By S.

Grapes
kept long.
See after
in Num. 82

70. Make a little square
or round hole in a Tree, or

Flowers in
Trees.

in some great arme thereof, of halfe an inch, or an inch deep, fill it with earth, sow therein some Rosemary seeds, Wall-flower, Carnation, or other seeds; and these will grow first in the earth, and after root in the sap of the Trees, and seem in time as if they were grafted.

Stock gilliflowers
to continue.

To re-
move
rooted
plants.

71. Remove both double and single stock-gilliflowers, when they are halfe a foot high, and then they will stand six or seaven years: whereas otherwise they will decay very speedily: *See before, Numb. 67.*

72. If you remove any rooted plants of Hearbe or flower, though it be somewhat forward in the Summer,

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This
great
other
by S.

73
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give
fourth
the c
have

mer, so as you do it in the evening, after the heat is past, and plant it presently, and water it, there is no danger of the parching heat of the sunne the next day. But in any case heave up the Earth with the Root carefully, so as you do not breake the least sprigge of any root; for then the sap goeth out of the Plant, and it perisheth. This way you may recover great Gilliflower roots, and others, without danger; by S.

73. Cut your Roses after they have done bearing, so soone as the Moone will give you leave, *viz.* the fourth, fifth, or sixth day after the change, and so you shall have store of Roles againe about

Roses to
bear twice.

Hedge and
Arbour
when to
cut.

Early
Peascods.

Gilder-
land roses.

about Michaelmas, or after. Take heed you cut no branch of a Rose so low, as that you leave no leading branches upon it: for that will hinder the bearing of the Roses exceedingly. It is also good in the after-said dayes after the change, to cut any Hedge, Arbour, &c. to make it grow the better: By S.

74. If you would have Peascods before all men, sow the early pease in August, three dayes before the full Moon, or within six dayes after, and these will come very early; By S.

75. How to plant the Gelderland rose, see among *Trees and Plants*, Numb.

119.

76. How

76.
seeds,
seedes
plump
Numb

77.
before
Radish
under
somm
Spyna
to gro
Prove
diner.

78.
and
grow
Tomki

79.
der, a
before
teth
fowle,

76. How to have Onion seeds, Annis seeds, and other seedes, to keepe full and plump, see among *Trees*: Numb. 135.

Seedfull
& plump.

77. Sow at every wane before Midsommer, to have Radishes unseeded, and one under another; but at Midsommer wane sowe Radish, Spynage, &c. but once, to grow till winter unseeded; Proved by *Tomkins* the Gardiner.

Radish &
Spynage.

78. The double Piony, and Flowerdeluce, will grow of their own seed. By *Tomkins*.

Piony and
Flower-
deluce.

79. Lime beaten to powder, and mixed with corne before it be sownen, preventeth Rookes, and other fowle, from devouring the same.

Seeds frō
devouring

same. By my Cousin *Matthews* of *Wales*; *Quare*, If it do not also help to enrich.

80. Gather your Grapes, *as before*, *num. 69.* dry them in a stove, till the faint water be spent, and so you may keep them all the yeare for your table. *Quere*, If they will not plump up againe at any time in warm water. *Quere*, of drying all manner of apples, plummes, peares, &c. this way, for lasting. *Before num. 69.*

81. As soone as your Strawberries have done bearing, cut them down to the ground; and as often as they spire, crop them, till towards the Spring, when you would have them to proceed towards bearing:

now

Grapes
kept long.
Prove this
in cherries,
clusters of
raisins, figs

Strawber-
ries large.

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them
of dr
of I
them
there
berri
two i
as I
Enric
way.

82
mides
beasts
or le
with
num.
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Lead
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now and then as you cut them, strew the fine powder of dried Cow-dung (*quare* of Pidgeons dung) upon them, and water them when there is cause. Field strawberries, this way, will grow two inches about in bignesse, as I am credibly enformed. Enrich Carnation pots this way.

82. To water your pyramids, pentagons, globes, beasts, &c. made of wood, or lead, and overgrowne with hearbes, *as before in num. 56.* let there be placed a long and large pipe of Lead, or tinne plate, reaching from the bottome to the top; let the bottome be so dred up, and let it have divers holes in the sides, at a
rea-

*After in
Num. 85.*

Watering
artificial.

reasonable distance : then have an exceeding large funnel of tin plate , to let in to the pipe at your pleasure to receive so much raine as will water the same sufficiently ; and when it raineth not , you may also water thereby with some rain-water kept of purpose.

Arbour
aloft.

83. *Quere*, If Pompions planted in large pots , will not grow and beare fruit : for then you may have an Arbour of them in an open tarras , leades, or gutter, having a frame to support the fruit. Enrich the earth , as before , *Num. 83.* now and then , to nourish the plant the better.

Musk-
Mellon to
prosper.

84. *Quere*, If Musk-mel-
lons will not grow , and bear

beare
a Lea
will
them
frosts
strain
the
put
where
these
rain.

85
they a
apt ti
they
when
done
excell
happe
for so
Roses
have
then l

beare in such pots , for so in
a Leads or tarras , the sunne
will shine strongly upon
them ; and you may defend
frosts and cold winds by
streining of canvas : water
the pots with rain-water
put into other pannes ,
wherein you may place
these pots when you want
rain.

85. Cut your Roses when
they are ready to bud in an
apt time of the Moon , and
they will begin to bud ,
when other Roses have
done bearing : this is an
excellent secret , if frosts
happen in budding time :
for so may you have store of
Roses , when others shall
have few or none , and may
then be sold at a high rate.

Roses late.

This

This I proved the 18th. of March 1606. being a few dayes after the change, upon divers standards at *Bednal-green*, being extreamely nipp'd with frosts, in budding time; and many of them did yeeld me great store of Roses, when the rest of my Garden did in a manner fail.

Store of
Roses.

86. Cut your Rose-standards in the twelve dayes, and not before: so they will beare exceeding well. *Proved often by Garret the Apothecary, and Pigot the Gardener.*

Flowers
from frost.

87. Towards Winter, new earth your Gillifloweres, Carnations, and such other flowers as you would defend from the violence of

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found
in st
them

of Winter; then whelme carnation pots that are bottomlesse upon them, or having a great hole in the bottome: and by this meanes, neither the sharp windes, nor the frost, can easily pierce to their roots. I hold this to be a good course for the defence of Artichocks in Winter.

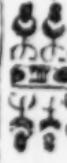
Artichoks
from frost.

88. You may keep bunches of Grapes that are found and well gathered, in stone pots, covering them carefully with sand.

Grapes
kept.

TO choose ground for a Hop-Garden, you must be sure it be not a moorish or wet soyle (though such perhaps may content a wild Hop) but a dry ground, if it be rich, mellow and gentle, is absolutely best. Yet a light mold (though never so rich) is unapt for this purpose, for the heaviest ground will bear the greatest weight of Hops. Place your Garden so as the Sun may have free access to it, either all day, or warmest part of the day. It must be guarded also from the wind, either naturally defended by hills, which is best; or artificially by Trees: but your Trees must stand aloofe, lest the shadow of them reach the Hops, or drop wet upon them, which will destroy all. About the end of *March*, or beginning of *April*, take your roots from some Garden where they are yearly cut, and where the hills are raised high (for there the roots will be greatest) let each root be nine or ten inches long, let there be three joynts in every root, and of the last year's springing; but be sure no wild hops cumber the ground, which cannot be distinguished by the root, but by the fruit, or stalk.

Se-


Sec
of
have
caying2.
enrich
of to
amon
3,4,5.
3.



Secrets in the ordering of Trees and Plants.

Dogs and cats applyed to the roots of trees before the sap rise, have recovered many old decaying trees, shred them.

2. Divers wayes for the enriching of a ground, whereof to make an Orchard, see among *Flowers*, Numb. 1,2, 3,4,5.

3. Gravelly ground is to
F 2 be

Dogs and
cats to the
roots.

Rich
ground.

Ground
enriched.

be dunged with chalk, and chalky with gravel, for lack of dung. T. T.

Box tree
planted.

4. Strip away the leaves from the boxen slippe, and winde not the stemme, but set it whole without winding. T. T.

Bayesto
plant.

5. Every slip of a bay tree will grow: strip off the great leaves, and set them in March, when the sappe beginneth to rise.

Eldern to
plant.

6. Every plant of an Eldern will grow. T. T.

Ground
enriched.

7. Sand enricheth a clay ground, and clay a sandy ground.

Poplar to
grow.

8. Every slip of the Poplar tree will grow.

Trees to
bush in
the top.

9. All Trees which you would have to grow thick at the top, and to bush there

there, cut or proin them in *May*: for they spring more in *June* and *July*, than all the year before or after.

10. Plant Cherries in *October*, *November*, *January* and *February*. T. T.

11. Plant Quince Trees in *October*, *November*, *Februa-*
ry and *March*. T. T.

12. Set Hasels and Peare
Trees in *October*, *November*,
February and *March*. T. T.

13. Set Apple cornels
evermore the end that is
next the root downward,
five fingers breadth between
every cornel; moysten them
often with water by sprin-
king, and set the cornels in
March. T. T.

14. Set Plumstones in
November, six or eight in-
ches

Cherries
when to
plant.

Quinces
when to
plant.

Hasels and
Pear trees
when to
plant.

Apple
cornels
set.

Plum-
stones set.

Pine apple
cornels set.

Peach
stones set.

Springs &
Plants set.

Branches
to root
in the
ground.

ches deep in the earth. T. T.

15. Set the Pine- apple cornel (first steeped in water three dayes) in *October, November, February, and March*, four inches deep.

16. Set Peach-stones the sharp end downward, in *November*, four or five inches deep. T. T.

17. Set springs and plants in harvest.

18. If a Plant put forth many stalkes or branches from the root, and you would have each branch to root, then bear up the earth about them to some reasonable height, either with tiles or brickbats; and in that earth, every branch will root. (*Quare*, if your branch will root at any part

part but in a joyn, about the which also, with a great aule you must pricke many holes even to the wood,) This is a necessary secret in all such plants as be straight and stiffe, and not apt to bow, or to be laid along within the earth. By Mr. Pointer.

19. How to recover an old decaying tree or Vine, with blood, and pigeons dung, see among the *Flowers*, Numb. 34.

Old tree
or vine
recovered.

20. An Orchard of dwarf-trees, that may be defended from all frosts, see among the *Flowers*, Numb. 32.

Orchard
of dwarf-
trees.

21. How to have early fruit, see among the *Flowers*, Numb. 33.

Early fruit

Fruit
growing
long.

Blossoms
tō frosts.

22. Plant Dwarfe Trees, and when the fruit is almost ripe, bow down their branches with their fruit upon them, into great earthen pots, or pitched tubs, either with bottomes, or without bottomes, the pots or tubs standing in the Earth; then cover them with boards and earth from the sun, and the sap of the Tree will keep them growing a long time, as I suppose. Prove this in greene fruit, ripe fruit, and almost ripe fruit; also in the blooming time, if you feare frosts bow downe the branches with the blossoms, as before to defend them in *May*, from the injury of the weather: and by this help you may

may ha
others
23.
thorou
ber, c
like to
basket
when t
cut of
the bask
abroad
is warm
in cold
venient
in plu
&c.

24.
with a
about
Trees;
tide, P
the hol
earth,

may happily have fruit, when others shall want.

23. Put a Vine branch thorough a basket in *Decem-ber*, chuse such a one as is like to beare grapes; fill the basket with earth, and when the Grapes are ripe, cut off the branch under the basket: keep the basket abroad, whil'st the weather is warme; and within doors in cold weather, in a convenient place: Prove this in plummes and cherries, &c.

Grapes growing long upon the Vine.

Plums and Cherries growing long.

24. Make divers holes with a croe of iron, round about the bodies of your Trees; and about Alhallon-tide, pour Oxe blood into the holes, cover them with earth, and this will make your

Trees to prosper.

Apricots
to prosper.

Speedy
woods.

your trees to prosper well.
Præbatum in Apricot trees,
By Mr. *Andr. Hill.* If you
do this at the Spring, the
smell of the blood will of-
fend you; and therefore
this practice is best for the
Winter season.

25. Plant the shoots of
Sallow, Willow, Alder, and
of all swift growing trees,
being of seven yeares
growth, sloping off both
the ends one way, and lay-
ing the floaped ends to-
wards the ground, let them
be of the length of a billet,
bury them a reasonable
depth in the ground, and
they will put forth seven
or eight branches, each of
which will become a tree in
a short time. I take moist
grounds

grounds to be best for this purpose: thus you may have speedy growing woods.

26. To make any branch of a tree to root, see among the *Flowers*, numb. 45.

27. Mixe green Cow-dung and urine together, wash the trees with a brush so high as you think meet, once in two or three months, and it will keep the trees from barking with beasts, conies, &c. and the same doth also destroy the canker.

28. Take of the rich crust of one acre of ground, and therewith you may make any Garden, or Orchard ground, that is but a foot deep in goodnesse, of what

Branches
to root.

Trees frō
Barking
or canker.

Rich mold
for Or-
chard or
Garden.

what depth you please to make the rootes of your trees to prosper the better.

Depth for trees.

29. In high grounds and sandy, set Trees deepe: in low grounds, and watry, plant them shallow; the shallower the better. By Master *Hill*. But by *Taverner*, you must set your Trees so, that the rootes may spread in the upper crust, which is the fruitful part of the earth; This crust in some grounds is two foot; in some three foot; in some one foot; and in some but halfe a foot deep: see the reason more at large, in his book, page 34.

Pruning of trees.

30. Lop, top, and pruin all Trees in *January*, in the wane of the Moone, and

pare

pare
so shal
stock t

31.
that ar
bruary
crease

32.
plant,
proin,
trees,
nuts
frosty
the w
North
the be
such a
but wi

33.
three i
may b

34.
white

pare them over in *March* :
so shall the bark cover his
stock the sooner.

31. Slit the bark of all trees
that are bark-bound, in *Fe-
bruary*, or *March*, in the en-
crease of the Moon.

Trees
bark-
bound,
helped.

Ill wea-
ther for
Orchard
works.

Oak when
not to be
felled.

Bignesse of
crabstock.

Bignesse of
Pear stock
and white
thorne.

32. Refuse to graffe,
plant, remove, lop, top,
proin, to slit the barks of
trees, or set or sow cornels,
nuts or stones, in weather
frosty or watry, and when
the wind shall be East or
North, or North-east. Yea,
the best Oake felled under
such a winde, will prove
but wind-shaken timber.

33. Small Crabstock of
three inches about, or lesie,
may be grafted.

34. Peare stocke, and
white thorne stockes of the
same

same scantling, all of them about the length of twelve or twenty four inches.

Bignesse of
wild chery
stock.

35. Wild cherry stocks, three, four, or five foot long, and three inches about, little more, or lesse.

White
plum-
stocks.

36. White plum-stocks would be of the same bignesse.

When a
stock is to
be grafted.

37. When the stock is able to put forth in one yeare a shoot of a yard long, then is it of strength sufficient to bear a Cions; for then it sheweth to like the ground well; otherwise, it will never prove a fair tree.

White
thorne no
stock for
pear or
warden;
good for a
Medlar.

38. A Peare or Warden grafted upon a white thorne, will be small, hard, cappard, and spotted; but a Medlar may well be grafted

fed
verne

35
trees

prove
verne

40
Wall
Taver

Rules
fing

41.

close
bottom
for the
maketh
Hill.

42.
June u

fed upon a white thorne. *Ta-
verner.*

39. The suckers of Quince
trees, and Filberds, will
prove well being planted. *Ta-
verner.*

40. For Chestnuts and
Wallnuts, set the nuts only.
Taverner.

*Rules for inoculation, or gra-
fing in the bud.*

41. **I**F you graft in the
bud, be careful to
close the same well in the
bottome of the scocheon ;
for there the sap riseth that
maketh it to take. By *Andr.
Hill.*

Suckers
planted.

Nuts set.

¹ Close
well in the
bottom.

42. From the eight of
June untill the **24** is the best
time

² Time of
grafting.

time to graft in the bud in plums and cherries, but especially in Apricots; but the surest rule is to do this work when you find the bark to come easily from the body.

43. Two parts of three in a Goof-quil taken 2-way in breadth, is an apt tool to take off a bud withall, without danger of hurting the bud. By Master *Pointer*. Some commend a tool of Ivory; some do only slip off the bud and the bark together.

3 Instrument to graft with.

4 Loſenge-
wife.

44. Graffing, by taking off a bud loſenge-wise, and setting the same in another like place upon a stock, is good. By Master *Pointer*. This is done at such time, as

as is fit to graft in the cō-
ons.

45. When your bud takes, then in March after, cut off all that groweth above it, stripping away all the buds that put forth: and that which remaineth serveth to leade up the branch of the bud to keepe it straight, and to defend it from breaking with the wind.

5 What to
do when
the bud
taketh.

46. If you graft two or three buds upon one tree, and they all do take, maintain only the lowest, and preserve and strengthen the same with some neither branch, as before in num 45.

6 The low-
est bud
maintain-
ed.

47. A Cherry prospereth well upon a Plumme stock; but not *e contra*: and there-

7 A cherry
upon a
plum-
tree.

G fore,

fore, if you graft a Cherry in the bud upon a branch, or bough, of a Plumtree that doth beare, you may make the same Tree to beare both Plums and Cherries. *Proved by Mr. Hill.*

8 Grafting
compasses.

48. A pair of Compasses made flat at the ends, and sharp with edges, is an apt instrument to cut away the bark for inoculation, both for a true breadth and distance all at once. And so likewise with the same you may take off the bud, truly to fit the same place again in the stock; some Compasses are made flat at one end, and sharp at the other,

9 Gelly
preserved
in the
stock.

49. You must have care in this grafting, not to hurt or bruise the gelly next the stock

stock which must minister sap to your bud.

50. Also when you have taken off your bud, clip the sides of the bark whereon the bud standeth, with a pair of Scissors, very even, in a square form; or rather somewhat longer than broad: for if you cut the Bark at the ends with a knise, laying the inside upon any board, you will hurt the gelly in the inside, and then the bud will never take.

10 Gelly
in the bud
preserved.

51. Make the place ready for inoculation, and remove not your bud before you mean to place it, for taking of too much ayre.

11 Bud to
take no
ayre.

52. When you have cut down the bark on either

12 How to
slit the
bark.

side, and likewise at the top, leave the bottome of the bark whole, and then slip down the bark; and between the barke and the Tree, put in the bud, and bind the loose barke of the Tree upon your bud, and by this meanes your grafting will take more certainly. The lesser your slit is, and the closer that your bud fitteth the slit, it is the likelier to take.

13. What buds are best.

14. How to slit the bark,

53. Take off your bud from a sprig of the last years shoot, for that is best for this purpose; By Mr. Andr. Hill.

54. Make an overthwart cut at the bottome, and then begin your slit upward, putting up your bud from the

the bottome of your slit,
closing well at the bottome;
This is contrary to the com-
mon course, which begin-
neth at the top, with a slit
downward.

Grafting of a Cions.

55. **A** Tool of Ebony,
or Box, is bet-
ter to open the bark than a
toole of Iron, if you would
graft a cions betweene the
bark and the tree. By Master
Pointer: for Mars tainteth the
sap presently.

Grafting
tool.

56. Grafting whipstocke
wise, and letting in the ci-
ons into the stock by a slit,
is good for young Trees,
that spring upon stones, or
pip-

Splicing
way.

pippins, being of three or foure yeares growth, and not above. Some call this the splicing way.

3 Cleaving
the body.

57. Grafting upon a old tree, by cutting off the head, and one inch from the center by striking in a small Iron wedge, and asit cleaveth by following the same with your knife ; and so on either side, placing of a cions, sap to sap; this is a way of grafting used by Master Pointer of Twick-bam.

4 Low
grafting.

58. Graft within a foot of the ground, if you would have the fruit to grow low, and easie to be gathered ; and this is also thought a fit way to make your cions to take, because the sap riseth speedily to the cions.

59. Graft

59. Graft your cions on that side the stock, where it may take least hurt with the iouth-west wind (because it is the most common, and the most violent wind that bloweth in the spring, and summer:) so as that wind may blow it to the stock, and not from the stock.

5 On which side to graft.

60. If you would have faire and kindly Cherry trees, set the stones of Cherries, of the same kind as your bud or cions is of, and at three or fourte yeares, you may graft thereon, according to the manner spoken of before, in Numb. 57. *viz.* great Cherries, upon stocks that carry great cherries.

6 How to have large Cherries.

91. Some think it good,
G 4 that

7 What cions is best

pippins, being of three or foure yeares growth, and not above. Some call this the splicing way.

3 Cleaving
the body.

57. Grafting upon a old tree, by cutting off the head, and one inch from the center by striking in a small Iron wedge, and as it cleaveth by following the same with your knife; and so on either side, placing of a cions, sap to sap; this is a way of grafting used by Master Pointer of Twicknam.

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59. Graft

59. Graft your cions on that side the stock , where it may take least hurt with the south-west wind (because it is the most common , and the most violent wind that bloweth in the spring , and summer :) so as that wind may blow it to the stock , and not from the stock.

5 On
which
side to
graft.

60. If you would have faire and kindly Cherry trees, set the stones of Cherries , of the same kind as your bud or cions is of, and at three or four yeares , you may graft thereon, according to the manner spoken of before , in Numb. 57. viz. great Cherries, upon stocks that carry great cherries.

6 How to
hive large
Cherries.

91. Some think it good ,
G 4 that

7 What ci-
ons is best

that your cions have some of the former years shoot with it, that it may be the stronger to graft, and abide to be put close into the stock; and perhaps it will forward the same in bearing.

8 Cions
put in
close.

62. It is the best way, to put in your cions in the grafting as close and straight as you may: neither are you here to fear the pinching of the stocke, unlesse it be where you graft in a deep clift of a large body.

9 The cions
made
the stock.

63. So likewise you may graft upon a bearing bough of an Apple tree, a contrary Apple; and when that cions is grown great enough to receive another graft, you may graft a contrary fruit thereon; but an Apple cions doth

doth not agree with a Peare stocke, (not *e contrā*) nor a Plumme upon an Apple or peare stock, neither will any Cions of a Fruit Tree take upon an Elme stocke; proved by Master *Hill*.

Upon what stocke to graft.

64. A Quince may well be grafted upon a Medlar stocke: and a Medlar will grow, but not prosper so well upon a Quince stocke, because the Cions will outgrow the stocke; proved by Master *Hill*.

10 Quinces upon a Medlar.

65. Unlesse the uttermost rind or barke of your stocke be very gentle and thin, it is best to slit the same along: but hurt not the innermost barke when you graft between the bark and the tree. By Mr. *An.* *Hill*.

11 Bark when to slit.

12 Prepa-
ring the
cions.

13 When
to graft
deep.

14 Graft-
ing at
Christmas

66. Before you graft your cions, take away a little of the uppermost barke on either side the edge, but hurt not the greenish part.

67. If your bark and cions are both straight, then may you graft the deeper into the stock, *viz.* four inches, and that is a very sure way to make the Cions to take, so as you joyne sap to sap well; but if either the stock or cions be crooked, then two inches are sufficient. By Mr. *Andr. Hill.*

68. You may graft an Apple cions at *Christmas*, so as you graft the same very deepe into the stocke, *viz.* four inches, or three at the least, and close it well: for, though the sap rise not, yet the

the moysture of the stock is sufficient to preserve the cions, until the sap do rise; proved by Mr. Andy. Hill.

69. Long Moss, well bound about the head of your stock, and of an inch or more in thicknesse, is sufficient alone to keep out both wind and water from the stock where the cions is let in. This must be repaired again at Mid-sommer.

70. Close your Cions with red or green wax, having a little butter therein about the slit: and this both keepeth out the wind, and maketh the sap to creep under, and cover the slit the sooner.

71. A peach may well be grafted or inoculated in a

15 Graft
bound
with moss

16. Closing
the cions.

17 Peach
upon
plumstock

18 One
tree let
into ano-
ther.

19 Length
of a cions.

20 Artifi-
cial wax
to close
with.

a plumme stocke, and will
thrive better than upon his
own stock.

72. If two Trees grow
together, that be apt to be
grafted one into another, then
let one branch into another
workmanly joyning sap to
sap.

73. If you have three or
four good buds next the
foot of the cions, that cions
is long enough to be gra-
fted; and so you may make
divers cions of one branch,
where you cannot get plenty
of cions.

74. Close all your inci-
sions upon small and young
stocks, with a mixture con-
sisting of green wax, or red
wax: and if your wax be
old, melt the same, and
adde

adde some fresh turpentine thereto, or else you may use pitch instead of wax, adding Turpentine: but let there be alwayes in your wax, one fifth, or one sixth part of butter, to keep the same supple; and when you have applyed this salve close to the joyns, then strew thereon the fine powder of dried earth, which you must have alwayes ready; and that keepeth it hard in the sun-shine: This is the onely composition to make the bark to coyer the stock. You must first after your grafting, binde the stock and the cions together, with the bands of Brawne, and then lay your tempered wax thereon; and

and if the band continue whole, you shall cut it in sunder about *August* following; by *Andr. Hill*.

21 How to
carry a
cions bar.

75. You may carry your cions in this manner, a long journey without endangering them: First, wax over the ends with the artificial wax, (mentioned before in Numb. 74.) then role them up in greet store of greene Mossie moistened, and tye them, and then put them into a case or box of wood, and so carry them; By *And. Hill*: You may keep a cions fourteen dayes or 3 weekes in grafting time, so as it be done before March, by sticking the same in your window onely; yet some will have the ends of them dipped

dipped in the compounded wax, as before in *Numb. 74.*

76. Alwayes be careful when you graft upon your stocks the splicing way, that your stocke be of as large a kind of fruit, or larger than the Cions, or else it will not be able to feed the Cions: or else you must graft upon larger stocks, if the cions be of a large fruit, and the stock but of a small fruit.

77. Plant an Apricot in the midst of other plumme-Trees round about it, at a convenient distance; then in an apt season, bore thorough your plum-Trees, and let in to every one of them, one or two of the branches of your Apricot tree, thorough

22 Upon
large fruit-
ed stocks.

23 Many
Apricot
Trees of
one.

rough those holes, taking away the barke on both sides of your branches which you let in, joyning sap to sap, and lute the holes up with tempered loame; and when they are well knit, the next year cut off the branch from the Apricot Tree: and so you have gotten many Apricot Trees out of one. Take away in time all the head of your Plum Tree, and all other branches maintaining onely that which is gotten from the Apricot. But some commend rather the letting in of a branch of one Tree, into the other, workmanly, for the more certain kinde of grafting.

78. Plant every stocke with

24 Observation in stock.

with one leading branch, at the least, to carry up the sap: and after your stocke hath growne one year, and maketh good shew of liking the ground, then graft your cions upon it, leaving one or two leaders; but none so high as to overtop your cions: and when your cions is well taken, then cut away your leaders, and all other spires; and so your cions will prosper exceedingly.

By *Andr. Hill.*

79. Some hold opinion, that if when others begin to graft in the slit, you do then cut off the head of your stock, leaving one branch near the head to lead the sap, and then after cold weather is all past, if

H you

25 Head
ing of
stocks, and
grafting
after.

you graft in the slit, that so your stock and cions will prosper far better, then if you had grafted the same in the slit at the first. By *Andr. Hill.*

But then you must remember to take away the leader, that the sap may more plentifully feede the cions.

26 When
to cut
down a
cions.

80. Some doe cut off all their cions in the Winter, *viz.* either in *November*, or *December*, and then lay them in earth; and in the new Moone of *March*, or *April*, they graft them, and they prove exceeding well; persuading themselves, that no knife is so sharpe, but that it will hurt the barke or gelly of the cions, if the cions

cions should be cut downe when the sap is up. This of Mr. *Colborne*, who commendeth this course, upon long experience. And if you graft those cions upon such forward trees, as have put out their sap very plentifully, they will prosper exceeding well; because being hungry, and almost starved for want of nourishment, they take hold of the sap that ariseth from the stock, very eagerly.

upō what
stock to
graft.

81. Note, that your stocks may put forth buds, yea, small leaves; and yet you may safely graft upon them.

27 Stocks
when to
graft.

82. If you would have your stocks of your young H 2 grafted

28 Stocks
to prosper.

grafted Trees to prosper, and grow exceedingly, then suffer the water-boughs to grow up with the stock, till the bodies be as big as your arme, and then prune them at your pleasure, for by this meanes the sap doth rise more lustily, when it hath many branches to draw from the root.

29 Late grafting, yet with advantage.

83. You may graft in the Cions, a Moneth after other men, and yet have a longer shooft than they, the same y are, in this manner: Cut off the head of your stock when other men do (which many times falleth out to be in very cold weather) then cover your stock over with your artificial wax, (as

(as before in Numb. 74.) and one moneth after, or when all cold weather is past, crop your stock one inch lower, and then graft your cions; and then (cold weather being past) the sap will rise very plentifully to maintaine the cions. *Proved by Master Andr. Hill.*

84. Graft not upon any young stock, till it be able to put forth a shoot of a yard long in one yeare (which sometimes will not happen, till it have been of two or three years growth) for till it put forth abundance of sap, it will never feed the cions sufficiently. *Proved by Master Andr. Hill.*

85. The stocks of black Cherry-Trees, are best to graft

30 When to graft a stock.

31 Stocks for great cherries.

32 Store
of stocks.33 Ground
for a Nur-
sery.A rule for
transplan-
ting of
Trees.34 Stocks
stopped.

graft the great Cherry upon ;
proved by Mr. Colborne.

86. To have your Nursery full of stocks to graft on, sow the stamping of crabs, which are commonly full of Cornels ; By Mr. Kirwin.

87. Let your Nursery consist alwayes of a more barren ground then your Orchard, whither you meane to remove your stocks and grafts. So likewise, if you transplant any Fruit trees, bring them alwayes from a worse ground to a better, or else they will never prosper.

88. Slope your stocks which you meane to graft on, like Colts feet, before you graft them: for so the bark

bark will cover the sooner, and the raine shoogeth from the stock the better. *Proved by Master Colborne.*

89. If you would have your graft to beare quickly, one special help is, to take it out of a bearing branch.

90. At the beginning of the year, and before the sap do rise, you may graft in the body of the stock, or by way of splicing upon every little branch of your Tree (but always remember to take off the top of your cions, having any leaves upon it:) when the sap is up, then you must graft betweene the barke and the stock; and then the sap is so plentifully risen, that

35 Cions
to beare
quickly.

36 The
times of
several
grafting.

the barke will easily pill from the body, then may you graft in the bud, or leafe. How to graft at *Christmas*, See before in *Numb. 69.*

37 Plants
upon trees.

38 Fruit
without
stones, and
hidden
w^th
leaves.

39 Apricot
grafted.

91. To graft Roses, or
hearbs upon trees, see among
the *Flowers*, *Numb. 49.*

92. Graft the small end
of the cions downward;
and so of pears and apples;
and they will have no coar.
Quere, of plummes grafted
upon a Willow, to come
without stones. Also, such
apples and pears thus grafted,
will for the most part
hang under the leaves, and
not be seene, unlesse you
come under the trees: By *S.*

93. A grafted Apricot is
the best: yet from the stone
you

you shall have a fair Apricot, but not so good ; and the grafted is more tender than the other. By S.

94. Graft a Medlar upon a Quince, and it will bring a faire and large Medlar : By S.

95. Actions of a pippin, grafted upon a crab-stock, is more kindly, and keepeth better, without touch of canker, then being grafted upon a pippin. By Mr. Simson.

96. Trees that bear early, or often in the yeare, as Peare-Trees upon *Windsor-hill*, which beare three times in a yeare ; these, though they be removed to as rich, or richer ground, yet they do seldom bear so early, or so

40 A large
Medlar.

41 A pip-
pin upon
what stock

Why trees
transplan-
ted doe
alter.

so often, except the soyle be of the same hot nature, and have the like advantages of situation, and other circumstances, with those of *Windsor*. And therefore commonly, the second fruit of that Pear-tree being removed, doth seldom ripen in other places. By Master *Hill*.

Colour,
sente,
or
taste alte-
red.

97. All those fantastical conceits, of changing the colour, taste, or sente of any Fruit, or Flower, by infusing, mixing, or letting in at the bark, or at the roots of any tree, hearb, or flower, of any coloured, or aromaticall substance, Master *Hill* hath by often experience sufficiently controlled: and though some Fruits and Flowers,

Flowers, seeme to carry the
sente or taste of some aroma-
tical body, yet that doth ra-
ther arise from their own na-
tural infused quality, then
from the hand of man.

98. Some do never graft
between the bark and the tree,
but in old stocks.

99. Lop the branches of
your trees alwayes in Win-
ter, before the sap do rise
within ten or twelve in-
ches of the trunk; and in
the Spring, when the sap
is up, cut those branches
close to the trunk: and so
shall you both have your
tree lusty, because no sap is
left in those vast branches
(which would have been
lost, if you had proined
them according to the usu-
al

Graft be-
tween
bark and
tree.

How to
lop.

all manner, in March, or April) and also the sap will then come purling out, and soone cover the Wood; whereby you shall avoid those blemishes in your trees, which others procure by proining them in the Winter. By Master **Andr. Hill.**

To have
green
trees in
winter.

Orchard
ground to
order.

100. *Quere*, what hearbs, flowers, or branches of trees, may be grafted upon the bay or holly-tree, or any such tree as keepeth green to Winter, to make them also carry green leaves in Winter.

101. Pare your ground with a shod shovel, so often as any grasse or weedes begin to put forth, both in your nursery and orchard; and

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and so shall you both keepe the ground mellow, and the raine shall have better passage unto the roots of your trees. By Master *Poin-ter*; who keepeth Conies in his Orchard, onely to keepe downe the grasse low, because otherwise it would be very chargeable. Also, in Viney ards, the use is to turne up the ground with a shallow Plough, as often as any grasse offereth to spring: but I think, that prevention of grasse, both in Orchard and Vineyard, is much better, if it were not too costly.

Vineyard
to order.

102. Upon the *Epiphany*, by reason of a great storme, an Apple-Tree, that had not beeene very fruitful before, was

Treeroot-
ed higher.
See after
in 106.

was almost blowne up by the roots at *Hackney* ; and after with Ropes it was drawn upright , and the whole mounted , and the Root covered with earth ; and that Tree , the next Sommer , bore an exceeding great burden of fruit.

Wreathed bodies of trees.

103. When your Apple Cornels are of two yeares growth , then set a long straight stick by each of them , winding the young stocke about the stick by little and little as it groweth , and fasteing it with bands under the stick , and so it will grow in a wreathed form.

Fruit enlarged.

104. *Quare* , If nipping off the new and tender tops about blossoming time will

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earth

will not make sommer fruit trees to blosome speedily, or to enlarge the fruit.

105. If an old Tree that is spent, and hath done bearing, be underpropped, so as the body sink not, and that the earth be after taken away from under all the roots, and instead thereof, good rich mold be conveyed into the void places, so an old tree will florish again, and beare fruit. *See before in Numb. 103.*

Barren
trees to
bear.

106. The Lord Zouch, in Winter, in the yeare 1597 (and Master And. Hill) thinketh moist weather is best, that the earth cleaving to the roots, may be also removed with them, the earth being fast bound with

Transpla-
ting old
trees.

with Fearn branches to the roots) removed divers apple-trees, damson-trees, &c, being of thirty or fortie years growth, at *Hackney*: the earth was digged in a good large compasse from the roots, the roots little hurt; holes were prepared for each tree before-hand, enriched with flesh and good earth; the branches and tops taken off almost close to the trunk; and they were planted again in the same houre wherein they were removed; and the roots placed towards the same point of the compasse as they first grew. He had a few damsons the first year, and all put forth leaves at Michaelmas after, anno 1598.

Bood

107. Blood laid at the roots of old Vines, hath been commended for an excellent substance to hearten them, unto Mr. Andrew Hill.

Old Vines recovered.

108. If you cut any Vines when the sap is up, presently cover the place with good store of Turpentine, and it will stay bleeding. Proved by Mr. Melinus. Some commend the straight binding of a packthred about the bark thereof: some sear with a hot Iron, and drop hard wax presently upon it.

Bleeding of Vines stayed.

109. By the opinion of some men, if outlandish fruit Trees be planted in England, they do strive to put forth blossomes, and to

Early fruits.

I bring

bring fruit at the same time with us, as they did in their natural places, unlesse the extremity of cold doe nippe or hinder them. And this seemeth to them to be the reason, why the Black thorne at *Glastenbury* Abbey, did use to blossome at *Christmas*, because happily the plant was brought from such a climat, as where it did blossome at the same time of the year.

110. If your Trees stand in wet grounds, some doe advise to lay lime on the face of the ground, to help the bearing of the trees.

111. If whil'st you maintaine some suckers to your stock, (because the stock is not yet so big as your arme) your

Wet Orchard hel-
ped.

The Cions
to prefer.

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the
suck
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fire.

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Fruit
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you
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Fruit
er the
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all the
you
Fruit.
third
only
some
only
sprouts

your Cions doth not prosper to your mind, then nip off the buds that grow upon the suckers, now and then in the midſt, till your cions thrive according to your own deſire.

112. In proining of your Fruit Trees, or of any other shrub or plant bearing fruit, you must alwayes have respect, whether it beare his fruit upon the first, ſecond, or third yeares ſprout; for you muſt never cut away all the bearing ſprouts, if you mean to have any fruit. As in Pippins, the third yeares ſprout doth onely beare fruit; and in ſome other Fruit Trees; onely the ſecond yeares ſprouts; in Goofeberries,

True
proining.

Timber to
grow of a
ny fashion

the last years. sprouts bear
most, by Mr. Andr. Hill.

113. When you Trees
are young, you may bow
them to what compasse you
will, by binding them down
with packthread to any cir-
cular form, or other shape
that pleaseth one best.
And by this means your
Timber will grow fit for
Ships, Wheels, &c. where-
by great waste of Tim-
ber in time would be a-
voided.

Apricots
to beare.

114. Mix Cow-dung and
Horse-dung well rotted,
with fine earth and Claret
wine Lees, of each a like
quantity, baring the roots
of your Trees in Jan. Febr-
uary and March: and then
apply of this mixture to
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117

the roots of your Apricot Trees, and so cover them with common earth: by this means, such Apricot Trees as never bare before, have brought forth great store of fruit. Prove this in other Trees. This of Mr. *Andr. Hill.*

115. Pears, Wardens, and Peaches, delight in Clay grounds.

116. When you plant any Tree, press not down the Roots together, with laying earth confusedly upon them, but extend every branch by it self, and cover it loosely with earth, according to that form wherein it did first grow. By Mr. *Colborne.*

117. Apricots like well
I 3 in

Peare,
Warden,
Peach,
in what
ground.
How to
use the
roots in
planting.

Apricot,
in what
ground.

in sandy ground.

Dwarf-
trees.

118. Some hold opinion, that if one set the slips of an Apple Tree, and so of divers other Trees, that these will prove Dwarf Trees. And so of the Tree that bear-eth a white flower as big as a Rose, called the *Gelderland Rose*.

Gelder-
land Rose.

Dwarf-
trees.

119. From May to the end of July, you may take off the bark from any bough of a Tree, round about the bough four inches deep, if the bough be as large as a mans wrist; or else a lesse depth will serve. If the bough be lesse in compasse, cover the bare place; and somewhat above and below, with loame well tempered with Horse dung, binding down

down the loame with hay, and brawn bands upon the hay, and so let it rest till about Alhallontide. And then within two or three dayes of the first New Moon, cut off the bough in the bare place, but in any case cut not the green bark above it; and then set it in the ground, and it will grow to be a fair Tree in one yeare, according to the length of the bough. *Quere*, of watering the loame now and then. Yet in reason, me thinks it a likelier course, to clap a gilliflower pot made of purpose in two halffes, with a great hole in the bottome, about such an arme; and after you have bound the pot well with wier,

wier, then to fill it with good earth, which you may better water in dry weather, than you can do the lump of loam. You may also use a twig no bigger than ones finger, in the same manner. Yet some do rather commend the binding of the loam, or earthing the Tree, with a pot about it, without taking away any bark at all, but only prick-ing many holes with a great aule, in that part of the bark which is covered with the loam or earth. You must re-member to underprop the pot, or else to hang it fast to the Tree. *Quere*, if a branch must not root at a joynt.

120. If you cut off the top

How to
top Elms.

Cop or head of an Eltre, it will not leave rotting downward, till it be hollow, and doat within: but an Oake will abide heading and not rot. Also, the boughs or branches of an Elme, would be left a foot long, next to the Trunk when you lop them. This of an expert Carpenter.

121. To avoid sappiness, fell both the bodies and the arms of Oaks and Elms in December after the frost hath well nipped them: and so your saplings, whereof raf-
ters, sparres, &c. are made, will last as long as the heart of the Tree, without having any sap. *By the same man.*

Sappiness
to avoid.

122. Take off a thin turfe of two foot, round about each

Young
trees to
grow.

each tree newly planted, cover the same with Fearn, Pease-straw, or such like, a handful thick: water your Trees once a moneth, if the weather prove dry, with dung-water, or common water, that hath stood in some open pit in the sun. This keepeth the ground loose from baking; whereby the Tree will prosper the better, and put forth shoots of three and four foot in one year: remember you do not set any Tree above one foot deep, or little more, and give each Tree some props for the first yeare, that the wind shake it not too much. And yet some, of good experience, do hold, that it skilleth not how much a young tree

tree be shaken (so as it be not blown up by the roots) and that it prospereth so much the better.

123. Quinces growing against a wall , lying open to the sun , and defended from cold windes , eat most delicately. **This secret** the Lord *Darcy* brought out of Italy. *quare*, of all other Fruits.

124. Set Peach stones in a dry ground , where there is no water within three or four foot ; for this tree hath one root that will run deep into the ground : and if it once getteth into the water the Tree dyeth. The stone bringeth forth a kindly Peach. Set Peach and Apricot stones in pots of earth , within doors in February ; keep

Delicate
Quinces.

Peach and
Apricot
stones to
fet.

Sap of trees
to gather.

keep the earth moist, by
watering now and then; trans-
plant them in *March* into
your Orchard. By S.

125. In the end of *March*,
gather the sap of the Trees
within a foot of the ground:
but take off the first bark, and
then slit the white bark o-
verthwart-wise, even to the
body of the Tree; but slit
only that part of the bark
which standeth South-west,
or between South and West,
because little or no sap ri-
seth from the North, or
North-east side. After you
have slit the Tree, open the
slit with your knife, so as
you may let in a leafe of a
Tree, first fitted to the
breadth of the slit; and from
this the sap will drop, as it
doth

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Hack

doth in filtration. Take away the leaf, and the bark will close again; earthing it with a little earth upon the slit. By S.

126. Cut away all the idle shoots of the last year, in your Apricot and Cherry Trees, before Christmas some three weeks, to make your fruit the fairer.

127. If you would stay the sap of Trees from rising, to make your Trees to blossom later, thereby to avoid frosts in blooming time, then hack crosswise, *viz.* overthwart the Tree, upon so much of the Tree as is within the ground; even down to the root; and then cover it again with earth. Hack it very thick, even tho-

Fair Apricots and Cherries.

To stay blossom-ing.

thorough all the bark to the very Wood, in the new Moone three weekes before Christmas, if they be Apple trees, pear trees, or warden trees; but for Apricois, do this rather in the full of the Moone, next before Christmas; but crosse hack your cherry trees and peach trees in the new moon next after Christmas: and so you shall have your blosomes, and by consequence your fruit, come later than other mens do, because the sap cannot rise. I think you must also hack the maine root. *Quare,*
By S.

128. If you would make a tree in a short time to cast his leaves, and thereby to bring forth young leaves, which

Green
trees in
Autumne.

which will last upon the tree
fresh and green, when all o-
ther Trees have lost their
leaves; then crosse hack
the bark, close to the
wood about Midsommer. In
all the crosse hackings here
mentioned, let every of
them be halfe an inch, or
thereabout, distant one
from another; and every
rank of hacks, one inch a-
bove another, or therea-
bout. Also, this practice
to avoid the fall of the leafe,
must be done but every se-
cond yeare to any Tree, for
fear of destroying the same.

129. But if in January, or
before the sap do rise, you
hack the body long-wise,
and not overthwartly, and
that only thorough the first
bark,

Quare, if
the Moon
be here to
be espes-
ciald.

Bodies of
trees to
enlarge.
Bark-
bound.

To kill
Mossie.

bark, and no further; this will make the bodies of your Trees to swell, and burnish the better, to maintain their heads or grafts.

130. And if by overthwart-hacking you would only kill the mossie of Trees, then let your overthwart backs be thorow the bark, even to the wood: and this you must do between *Albiontide* and *S. Andrews day*; *viz.* so soon as the leaves be off the Tree, both to avoid mossie, and to make barren Trees to bear. You must make these hacks with the nether corner, or point of a small hatchet, so as every notch may be about half an inch long: and hack the body the height of a man;

viz.

viz. one row of hacks, two inches below one another, all over the body: but let there be a distance between the overthwart hacks, so as they may not meet in a round ring, like a circle, about the tree: and by this meanes the uppermost bark whereon the mosse grew, will in time fall clean away, and the mosse with it, and the tree will gather a new bark. And though the tree be thus hacked but to a mans height, yet the tree will beare much better the next yeare. But when your leisure serveth, crosse-hack all the body in this manner, even to the trunk, as also a part of every great arme that groweth next the tree:

K Note,

Note, that in seven years the Tree will be bark-bound, and so mossie again, as at the first: and therefore once in seven years you must renew this work. By S.

A Tree
to root
higher.

131. But if your tree bear not, because it was planted too deepe at the first, then take away the earth from the body of the tree; and a little below the uppermost face of the ground, prick the body of the Tree clean thorough the bark, full of holes, with a pretty round aule or bodkin, of a reasonable bredth. Then cover the body with earth, and divers new roots will issue, to make the same fruitful.

Sap choa-
ked.

132. And if your Tree beare not well, by reason that

that all the sap ranneth into leaves, which is a common fault in divers Orchards, then to check the sap, cut off all the young roots that grow about the master roots; and crosse-hack the body under the ground, and likewise the maine roots, as before (Num. 131.) to avoid mosse, and cover the Tree with earth againe: for by this meanes the sap is kept from rising up too plentifully. By S.

Barren
treesto
bear.

133. All barrennesse, or unfruitfulnesse in Trees, doth for the most part arise, either by reason of their mossiness, whose cure is set downe before in Numb. 131. or because they are bark-bound; whose remedy

Causes of
barrennesse
in trees.

is also in *Numb.* 130. or because they were planted too deepe, whose remedy is in *Numb.* 132. or by reason that the sap, which should turne into fruit, runneth together, or for the most part into leaves: and this is remedied also in *Numb.* 133.

Apples
without
wrinckles.

134. Gather not your Pippins till the full Moon, after Michaelmas; so may you keepe them a whole yeare without shrinking: and so of the grapes, and all other fruits; so of Onion seeds, Annis seeds, and other seeds which you would keep full and plump.
By S.

Respect
between
the stock
and cions.

135. Let your tree whereon you graft, be more forward than the cions; *viz.*
let

let it either have bigger buds than the cions hath, or small leaves: but the cions is best that hath onely red buds, and no leaves.

136. I have seen Cherries grow in clusters like Filberts, *viz.* 2, 3, 4, and 5. upon one stalk. *Quare*, if it be not performed in this manner; joyne 2, 3, 4, or 5. leaves with the buds in one slit together, by way of inoculation, and so leave them.

Cherries
in clusters

Here I will conclude with a conceit of that delicate Knight, Sir *Francis Carew*, who, for the better accomplishment of his Royal entertainment of our late Queen of happy memory, at his house at *Beddington*, led her Majesty to a Cherry-

K 3 tree,

tree, whose fruit he had of purpose kept back from ripening, at the least one moneth after all Cherries had taken their farewell of *England*. This secret he performed, by straining a Tent or cover of canvas over the whole tree, and wetting the same now and then with a scoope or horne, as the heat of the weather required; and so, by with-holding the sun-beames from reflecting upon the berries, they grew both great, and were very long before they had gotten their perfect cherry colour: and when he was assured of her Majesties coming, he removed the Tent, and a few sunny dayes brought them to their full maturity.

'A

A Philosophical Garden: with
a touch at the vegetable
work in Physick, whose prin-
cipal fire is the Stomach
of the Ostrich.

First, pave a square plot with
brick, (and if it be covered
with plaster of *Paris*, it is so
much the better) making up sides
of brick also plastered likewise:
let this be of a convenient depth,
fill it with the best vegetable
which you can get, that hath
stood two yeares, or one at the
least, quite within his own Sphere:
make *contrition* of the same;
and be sure to avoid all obstruc-
tions, imbibe it with *Aqua cœle-
stis* in a true proportion, grind it
once a day till it be dry. being dry,
let it stand two or three days with-
out any imbibition, that it may
the better attract from all the hea-
venly

venly influence, continuing then also a *Philosophical contrition* every day (this grinding must also be used in the vegetable work where the ♀ of hearbs is used instead of *aqua cœlestis*) during all the time of preparation : then plant what rare flowers, fruits, or seeds, you please therein. And (if my theory of Nature deceive me not this h so enriched from the heavens, without the help of any manner of soyl, marle, or compost (after one years revolution) will make the same to flourish and fructifie in a strange and admirable manner : yea, I am perswaded, that it will receive an *Indian* plant, and make all vegetables to prosper in the highest degree, and to bear their fruits in *England*, as naturally as they do in *Spain*, *Italy*, or elsewhere.

So likewise of that Walnut-tree, planted within the limits of the aforesaid Abby, which on St.

St. Barnabias Eve standeth bare,
and naked without leaves; and
upon the day it self, richly clo-
thed with his green vesture.

I could remember many Phi-
losophical plants in *England*,
were it not that the losse of *Rip-
ley's* life, that renowned Alchy-
mist, who suffered death (as the
secret report goeth) for making a
Pear-tree to fructifie in Winter,
did command an *altum silentium*
in these matters: but it was the
denial of his medicine, and not
the crime of conjuration, which
was but colourably laid to his
charge, that wrought his over-
throw.

Nay, if the earth it self, after
it hath thus conceived from the
clouds, were then left to bring
forth her own fruits and flowers
in her own time, and no seeds or
plants placed therein by the hand
of man, it is held very probable
(unlesse for the sin of our first Pa-
rents,

rents begun in them, and mightily increased in us, the great God of Nature, even *Natura naturans*, should recall, or suspend those fructifying blessings which at the first he conferred upon his celestial Creatures) that this heavenly earth, so manured with the starres, would bring forth such strange and glorious plants, fruits and flowers, as none of all the herbarists that ever wrote till this day, nor any other, unlesse *Adam* himselfe were alive again, could either know, or give true and proper names unto these most admirable simples.

Also, in the work of fructification, I think that Corn it self may be so philosophically prepared, only by imbibition in the Philosophers *aqua vite*, that any barren ground, so as it be in nature kindly for Corn, shall bring forth a rich crop, without any matter added to the ground, and so with

a small or no charge, a man may sow yearly upon the same ground. And he that knoweth how to lay his fallowes truely, whereby they may become pregnant from the heavens, and draw abundantly that coelestial and generative vertue into the *matrix* of the earth; this man, no doubt, will prove the true and Philosophical Husbandman, and go beyond all the Countrey *Coridons* of the Land, though never so well acquainted with *Virgils Georgicks*, or with Master *Bernard Palisie* his congregative part of raine-water, which he calleth the *Vegetable salt of Nature*: wherein though he observed more then either *Varro*, *Celsus*, or any of the ancient Writers in this kind, did ever dream of; yet doth he come many degrees short of this heavenly mystery.

Now, to give you some taste of that fire which the Philosophers call

call the *Stomach of the Ostrich*, (without which the Philosophers true and perfect *Aqua vita* can never be made) you must understand, that it is an outward fire of Nature, which doth not only keep your Glassie, and the matter therein contained, in a true proportionable heat, fit for workmanship, without the help of any ordinary or material fire: but it is also an efficient and principal cause, by his powerful nature and piercing quality, to stir up, alter and exalt, that inward fire that is inclosed within the Glassie in his own proper earth. And therefore here, all the usual Chymical fires, with all their graduations, are utterly secluded; so as neither any naked fire, nor the heat of filings of Iron, of sand, of ashes, nor of *Bals. Mar.* though kept in a most exquisite manner, nor any of the fires engendered by putrefaction, as of dung

dung and such like, no nor the heat of the Sun, or of a Lamp, or an *Athanor* (the last refuge of our wandring and illiterate Alchymists) have here any place at all. So that by this fire and furnance onely, a man may easily discern a mercenary workman (if he deale in vegetables onely from a second Philosopher ; and if in any thing (as no doubt in many things) then here especially *vulgaris oemlus caligat plurimum*.

This fire is by nature generally offered unto all, and yet none but the children of Art have power to apprehend it: for, being cœlestial, it is not easily understood of an elemental braine; and being too subtile for the sense of the Eye, it is left onely to the search of a divine wit: and there I leave it for this time.

The physical use of this fire, is to divide a *Cælum terra*, and then to stellifie the same with any ani-

animal or vegetable star, whereby in the end it may become a quintessence.

Here I had thought to have handled that crimson coloured salt of Nature, so farre exceeding all other salts, in a true, quick, and lively taste, which is drawn from the Philosophers earth, and worketh miraculous effects in mans body; and withal, to have examined that strange opinion which Doctor *Quercitanus*, an excellent *Theorist* in Nature, and a great Writer in these dayes doth violently maintaine, in his discourse upon *Salt peter*.

But because it is impertinent to this subject, and that I have discoursed more at large thereon in my *Abstract of Corn. Agrip.* his *Booke De occult. Philos.* and for that *Quercitanus* doth shew himselfe to be a true Lover of *Hermes Household*, I will not straine my wit, to write against any particular

lar person that professeth himself to be of that family; although both he, and some others, as great as himself, must give me leave, whensoever I shall be forced in that Book to handle the practical part of Nature, and her process, happily to weaken some principles and positions, which both he and they have already published; excusing my self with that golden saying of Aristotle, φίλος μήτε Σωκράτης, φίλος δέ Πλάτων, ἀλλα φιλτάτην αληθεία. *amicus Socrates, amicus Plato, sed magis amica veritas.* But I am affraid I have been too bold with vulgar wits, who take no pleasure to heare any man *altius philosophari*, than they can well understand; and therefore I have compiled this Book in plain termes, of such a Garden and Orchard as will better serve for common use, and fit their wits and conceits much better.

FINIS.

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line of the Crown in Fleet-street between
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		The Hall-ender.
		Maids Tragedy.
		King and no King.
		Whistler.
		The grateful Servant.
		The strange Discovery.
		The Merchant of Venice.

THE
SECOND PART
OF THE
GARDEN of EDEN.

OR
An accurate Description of all
Flowers and *Fruits* growing in
ENGLAND;

WITH
Particular Rules how to advance their
Nature and *Growth*, as well in *Seeds*
and *Herbs*, as the secret ordering of
Trees and *Plants*.

By that Learned and great Observer,
Sir *HUGH PLAT* Knight.

Never before Printed.

London Printed for *William Leak*,
at the Crown in Fleetstreet betwixt
the two Temple-Gates. 1660.

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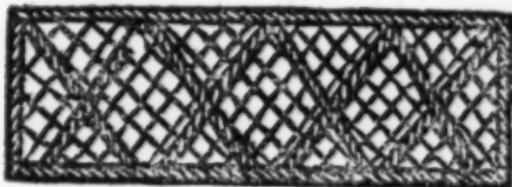
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TO THE READER.

T were very vain to commend the First Part of the GARDEN OF EDEN which hath been so often welcomed into the world in so short a time ; for (without foolish Apologies, which are but officious lies) we can assure you it hath had four Impressions in less than six years. The benefit it brings is as well known to the *Country* as to the *London Stationer*. Only let me

F

To the Reader.

inform you, That a *Second Part* (never before Printed) full as large as the First, is here presented you; and (if possibly upon reading you could doubt its integrity) you may at pleasure see the original Manuscript under the Authors own hand, which is too well known to undergo the suspicion of a counterfeit. Therefore if heretofore the First Part of the **GARDEN OF EDEN** were a useful Book, this is now much more, when the **GARDEN** is enlarged, and far better stored. You will soon finde if truth be not now told you.

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The Second Part OF THE Garden of E D E N.

Divers conceited Experiments in Trees, Plants, Flowers, Herbs, and Fruits.

Num. 1.

Fruit and Flowers to come early, and before others, or late and after others, or to have them growing all the year.

Sect. I.



IR Francis Wal-
singham caused
divers Apricot
Trees to be planted
against a south Wall, and their
B Branches

Planting
of Trees
against
br ck wals.

How to
multiply
the Sun-
beams up-
on Trees.

Branches to be born up also against the wall according to the manner of Vines, whereby his Plumbs did ripen three or four weeks before any other that grew at large in any Orchard, and had not the benefit of the Suns reflexion. Hereupon I do infer, That if every Tree were planted in a several Tabernacle, or such Concave as were aptest for the receiving and reflecting of the Sun-beams upon the Fruit; and the same also either lined with Lead or Tin plates, or garnished with glasses of steel or crystalline, that by such means, peradventure, the reflexion might be multiplied, to the greater forwarding of the Fruit, especially the Trees being Dwarf-trees

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trees

trees, whereby the Sun might reflect both from the sides and from the ground, unto the uppermost branch or bough of the Tree: And by these helps the Olive, Pomegranate, Orange and Lemond trees, and such like, might happily bear their Fruit in our cold Clymate. *Quare*, if these walls did stand so conveniently, as they might also be continually warmed with the Kitchen fires, as serving for Backs unto your Chimneys, if so they should not likewise finde some little furtherance in their ripening.

2. *Quare* also, If wrapping of ropes of Hay about the bodies of the Trees to defend them from the windes, and other cold that happeneth

Olive,
Pomgra-
nate, O-
range and
Lemond
trees to
bear fruit.

Sol and
Vulcan
meeting
together
in the walls

Trees
wrapped a-
bout with
Hay.

**Neurish-
ing Li-
quor, rich
Mould.**

To prevent the
frogs in
May.

Early
fruit with-
out the
help of
Brick walls.

eth most in the night sea-
son.

3. Water these Trees with nourishing and feeding Liquors, and give a new supply now and then of richer Mould unto them; and if you will prevent the dangers of the frost, which they are subject unto in their blossom; then lay open the roots for a time, that the sap may not rise too fast; or if your Orchard consist of Dwarf-trees, growing in great pots of stone, or vessels of wood, you may remove them from time to time as you see cause, and so preserve them from all injury of the weather.

4. And lest I should leave
all other men destitute of
early Fruit, whose ability will
not

not serve to compass their Orchards with Brick-walls (which would prove an excessive charge) my advice is, that their Orchard should consist wholly of Dwarf trees, over which, being close compact together, they may spread a canvas tent removable at pleasure, or defending onely the North, East, and Northeast winds from them with canvas walls; which canvas they may hire of the Upholsters after the rate of one penny the ell for many moneths together; for notwithstanding thisimpleyment it serveth the Painters turn sufficiently. Neither ought this course seem very chargeable unto us, if we do either consider the infinite number

Canvas
tent.

Canvas
Walls.

Dwarf
trees more
fortunate
then o-
thers.

Preparing
of the
ground for
Dwarf-
trees.

of Trees that a small square will receive, if they be closely packed together; or if we do estimate the profit that will arise of such forward fruit, which will easily countervail the hire of our canvas. And yet for our better encouragement herein, I have heard that also noted of our best experienced Practisers this way, That these kinde of Dwarf-trees are commonly more fortunate in their bearing, then our ordinary trees, whose bodies are greater, and carry their heads so high into the weather; and it shall not be amiss, notwithstanding these walls or covers, to place these Dwarf-trees (especially if they grow in vessels removeable) either upon

upon Pavement of Free-stone or Brick, or upon a platform of Gravel, whereby the Sun may reflect the stronger upon them, always provided that you have also care to keep them sufficiently moist, and from being withered or parched with the heat, (which you may easily prevent in the time of dry weather) by watering them continually by way of filtration out of apt vessels placed for the purpose. And though your trees be fixed and growing in the ground, yet it shall not be amiss to have a flore of hard gravel round about them to help the reflexion of the Sun, so as you have care either to leave sufficient store of earth about the body of every

The manner how to water them.

The big-
ies of
nese Or-
chards.

Tree, and the same earth to be laid in the forme of a concave receptive to receive such rain water as falleth, and to convey that unto the root; or else if you will cover the whole face of the ground with gravel, you must then at the foot of every tree thrust in a pipe of stone (for which purpose, and to avoid charge, the neck of these stone bodies wherein the Goldfiners do use to draw their strong water, will serve very aptly) which must receive a continual watering *per laneam linguam*, as before, to keep them moist: And here (if it were not for charge) I could wish all these Orchards that are replenished with Dwarf-trees, to consist of small squares, so as they might

might be ten or twelve yards every way in length and breadth, and no more; about which squires I would also erect the cheapest wall that could be devised, which should not exceed three or four foot in height; the use whereof is so manifest, as that I shall not need to publish the same in any plainer terms. But if to have early Fruit, we do neither regard labor nor charge, then let us build a square and close room, having many degrees of shelves, one above another, in which we may aptly place so many of these Dwarf-trees as we shall think good; in time of cold weather, we may keep the same warm in nature of a Stove, with a small fire being made in

The height
of the walls
of this Orchard.

A Stove to
keep dwarf
trees in.

When to
place the
Trees in a
Stove.

A Stove
kept with
small
charge.

in such Furnaces, and in such manner as I will at all times be ready to shew to such as are willing to make any use thereof; and if the weather be fair and open, and that the room be made full of windows or open sides, we may for such time use the benefit of the Sun-shine, or carry them abroad at our pleasure; and for the forwarding of your Fruits, you shall not need to begin this practice till the sap begin to rise, and then but for a few moneths onely, except in the night time, when we shall fear any frosty or other nipping weather. There be divers persons whom this secret doth fit very well, and may perform the same without expence of money, amongst which

lants,
in such
ll times
h as are
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r such
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fruits,
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which number are all such as are forced in respect of their trade to keep any great or continual fires, as Brewers, Diers, Soap-boilers, Refiners of Sugar, and the owners of Glass-houses, and such like, who may easily convey the heat or steam of their fires (which is now utterly lost) into some private room adjoyning, wherin they may bestow their Fruit trees to their greater pleasure & contentment. Neither do I think it an unseemly sight to have some dozen or twenty of these Dwarf-trees ranked in good order upon high shelves in our winter-Parlors, where we may also make a second use of our chargeable fires. Yet this caveat let me give by the way

Winter
Parlors
made Or-
chards.

A caveat
for dwarf
trees that
have been
tenderly
kept.

way (which I learned by the experience of my friend who in one frosty night, by the negligence of his Servant, lost 20 of the fairest Carnation Pots that I have seen, being all of them very full of Buds, and many of them blown out in the dead of winter, and all this happened by leaving them onely one frosty night abroad) that when we have made our Dwarf-trees thus tender, by defending them from all cold and hard weather, by a close and warm Stove, that we must be very careful, that if (to take the advantage of a shoure of rain, or some other fair and sunny weather, we happen to carry them abroad) that about the Sun-set, or rather somewhat before,

before, we convey them again to their place of refuge, and some think it necessary to expose them to the air only in rainy and temperate days, and rather to lose the rain, then to set them abroad in a cold day. I hope I shall not here need to give any advice for the necessary watering of these Trees in their convenient time, because there is no man so ignorant, but that he knoweth that all Vegetables do receive both their life and nourishment from heat and moisture; onely they may make their choice (if they please) of these several manners, and likewise of some of these compound liquors as are elsewhere in this Discourse handled more at large, whereby to water them in

Watering
the dwarf
trees in
the Stove.

in a more fructifying manner
then any of our ordinary
means doth afford, set your
pots in pans of water that
hath been before exposed to
the Sun.

Vines to
bear early.

Several
earths or
moulds.

5. The blood of beasts
tempered with some lime and
earth (for without lime the
blood engendreth great store
of worms) is most excellent
to lay at the roots of Vines to
hasten the ripening of the
Grapes: *Quare*, if the same
be not good for all other Trees
and Plants to that end. I
have also both heard and read
of Pigeons dung greatly com-
mended for the forwarding
of Fruit-trees. *Quare*, the
ashes of Beans stalks or Vines,
or of salt alone, or salt and
earth first putrified together,
of

of Sope-ashes, & all those sundry sorts of Soyl more plentifully displayed in my Discourse upon the vegetable Salt, if any of these being applied in due proportion, and in the true season of the year, will not afford some expedition in this work, and how often it shall be necessary to change and renew your soil in one year, if you mean to have the first Fruit, and before all other. *Quære*, of Lime, and of such earth as is found in hollow Willow trees, and of Fearn first putrified.

6. When the Grapes are knit, you must nip off the new sprigs from time to time as they put forth, and thereby (as some think) your Grapes will

Lime.

Nipping
off Grapes.

will both grow the greater, and ripen the sooner.

Rooting
of seeds
within
doors be-
fore they
be towed
abroad.

7. Mr. *Googe* in his book of Husbandry commendeth the mingling of stones with earth, and so laid up together in a vessel one year before you plant them, and by this means you may have store of Sets very speedily to make Hedges withal, by planting them in a inner Garden, as he termeth it, *Quare*, if Pease, Beans, Pompeons, Musk-Mellons, and all other Pulse and Seeds which we would have to come early, were used in this manner for a season, in some small pots, or other vessels, and filled with rich mould, and watered with the Liquors *ante num. 3.* being first made blood warm,

warm, and the same pots and vessels also placed in a gentle Stove or some other convenient place aptly warmed with the fire, and a ter in *March* if it prove warm, or else in the beginning of *April*, if the same were sown, if so they would not be much forwarded.

8. And for t' e keeping of any Flowers or Plants abroad, as also of these seeds thus sown within doors, or any other Pots of Flowers, or Dwarf-trees in a temperate heat, with small c large, you may perform the same by hanging a cover of Tin or other metall over the vessel wherein you bo'l your Beef, or drive your Buck, which having a pipe in the top, and

A Stove
for all Ve-
getables
good
cheap.

C bein^o

being made in the fashion of a funnel, may be conveyed into what place of your Orchard or Garden you shall think meet; which room, if it were so made, as that at your pleasure it may become either close or open, you may keep it in the nature of a Stove in the night season, or in any other cold weather, and in the Summer time you may use the benefit of the Sun-beams, to comfort and cherish your Plants or Seeds. And this way, if I be not deceived, you may have both Orange, Lemons, Pomgranet trees, yea peradventure Coloqnintida, and Pepper trees, and such like: The sides of this room, if you think good, may be plastered

ed, and the top thereof may be covered with some strained Canvas to take away at your pleasure. *Quare*, if it be best to let the pipe of lead to breath out at the end onely, or else at divers small vents which may be made in that part of the pipe which passeth amongst the Stove. I fear that this is but a meer conceit, because the steam of water will not extend far; but if the cover to your pot be of mettal, and made so close that no air can breath out saving at the pipe, which is soldered or well closed in some part of the cover, then it seemeth probable, this cover may be put on after the pot is scummed.

9. Mr. *Googe* citeth an opinion

Pease and other seeds steeped in several liquors before the sowing.

Parsley to grow spee- dily.

Compound earth.

nion of some men that hold, that Pease being laid in water a day or two before they be sown, will grow the sooner. *Quære* of Milk, Spirit of wine, or water that hath been long infused upon dung, or waste soape ashes, or common ashes, whose heart and salt hath not been drawn out before; *quære* also, whether the waters aforesaid being cold, or blood-warm do serve best for this purpose; *quære* of steeping them in Sack or Malmsey, White wine, *aqua composita*, &c.

10. I have been credibly informed, that if you make a lay of powdred lime and ashes, and then a lay of earth and dung, and then a lay of lime, and upon that a lay of good

good fat mould, and do there-
in sow your Parsely seeds be-
ing first steeped in white wine,
and then water them present-
ly, that so the heat of the lime
and dung will force up a won-
derful and sudden spring in a
few hours: *Quare*, if there
be any good use of this secret
though it should be true; *quare*
also of watering the said seeds
with *Aqua vita*, or wine Lees.
Fabam refrrunt novem diebus
obrutam oleo, germinare in du-
abus horis impositam pani cali-
do. Cardan. de rer. varietate,
878.

11. Some commend the
applying of Gun-powder to
the roots of Plants to for-
ward them; *quare* of Salt-
peter, and *quare* of the Salt
that the Petermen derive

Wine, A-
qua vita,
Wine lees,
water with

Beans flee-
ped in oyl.

Gunpow-
der, Salt-
peter, and
salt.

Ashes.

from the Salpeter ; *quære* of the ashes of every Plant bestowed upon it self.

Compound earth.

12. Take one part of Soot and one part Cowdung, and two parts earth ; plant the Slips of your Carnations therein after they are well rooted. *Quære* of Roses and other plants.

Cherries
kept back
ward by a
tent.

13. Sir *Francis Carew*, as I have heard, did spread a tent over a Cherry-tree that was well taken, and before they were grown to any great bigness, and thereby defended them from ripening ; now and then also sprinkling water upon the Tent.

Silt and
earth pu-
trified to-
gether.

14. *Quære* of putrifying of silt and earth together in some apt place, before you apply the same to the roots

roots of your Fruit trees, or Flowers, whether the same will not help your Plants forward?

15. *Quare* of strowing Sope-ashes at several times upon Pease, or at the roots of other Fruits or Flowers before they be ripe, what effects will follow; and so of salt, lime, and all other kindes of enriching soil. These ashes are reported to kill worms, weeds and rushes where they are bestrewed.

Quare of the use of Sea-coal-ashes.

Sope-ashes
used often
to forward
Pease,
Fruit, &c.

Seacoal
ashes.

16. *Quare* of arching of a small Orchard for Dwarf-trees, and fire placed under the arches in cold weather; *quare* also of planting of great store of pieces of glaſs upon

Arching
the ground

Glasses
upon the
ground.

Herbs and
flowers
kept by co-
vering
them as
they grow.

Backward-
ing of
Fruits and
Flowers se-
veral ways.

the whole face of the ground
to procure a stronger reflexi-
on.

17. There were divers daint-
y fresh fallat herbs presented
at Christmas, to Sir *Cutbert*
Bucks Lord Mayor of *London*
by an *Italian*, which he had
only covered in the earth as
they grew. *Quare* if it be not
better to cover them over
with sand than with earth, to
defend them from putrefacti-
on; *quare* how many sorts of
Herbs and Flowers may be
kept this way. *Plus num.*

19.

18. Cut Roses in the end
of *April*; (*quare* if the bud
only, or the buds and other
shoots must be cut off when
they are full of young buds,
and the branches will bud a-
gain

gain when all other Roses have done blowing; this I did see experimented in *Oxford* in *July 1585*. Cut Roses monethly one under another, and see what effects will follow. I have proved the cutting off of such Gilli-flowers stalks as began to spindle, and by that means they put forth their buds much later; *quare* in what other Fruits or Flowers this practice may be used; *quare* also, if Flowers or other Dwarf-trees may not be hindered from bearing their fruit early, by keeping such pots in shady places, or keeping them within doors for a time, until you would have them to come forward; *quare* of Beans and Pease cut down in

April

Beans and
Pease cut
down be-
times.

Glasses
upon the
ground.

Herbs and
flowers
kept by cov-
ering
them as
they grow.

Backward-
ing of
Fruits and
Flowers se-
veral ways.

the whole face of the ground
to procure a stronger reflexi-
on.

17. There were divers dainty
fresh salad herbs presented
at Christmas, to Sir *Cutbert*
Bucks Lord Mayor of *London*
by an *Italian*, which he had
only covered in the earth as
they grew. *Quare* if it be not
better to cover them over
with sand than with earth, to
defend them from putrefaction;
quare how many sorts of
Herbs and Flowers may be
kept this way. *Plus num.*

19.

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April

Beans and
Pease cut
down be-
times.

Fruit kept
backward.

April or May; quare of twist-
ing the branch of any Tree
or Flower, and binding the
same so twisted to a stick;
quare of binding a band
streight about the branch of
any Tree or Flower, or wind-
ing of Packthread many folds
about the same. And quare
how long such fruit or flowers
will hang upon their branches
being thus used. Also when
you have wreathed a branch
of a Cherry-tree, or Plum-
tree with your hand some-
what hard, then stay it there
with two splents, & vide quid
fieri. Also prove how little of
the bark will serve a branch
to convey the sap up to the
fruit, and take away all the
rest with a knife. Roses have
been tried to come late by
binding

Late Roses

binding the bark hard of the branches whereon they grow.

19. Quare of covering over the Violets that come about Michaelmas with sand, *sicut ante num. 17.* and so of Strawberries that blow in cold weather; but this covering for Flowers, I think, would be done by whelming of apt earthen pots upon them, which pots may also be covered over with earth or sand if you see cause, for that otherwise you shall deface the Flowers. Quare of Artichoke roots covered so all the winter to make them more forward in the Spring, and so of the like profitable Plants; quare if it be not necessary to have earthen covers or caps to fit

Covering
of Violets
or Straw-
berries
with sand
or pots.

fit these pots, which you may take off at your pleasure in warm and rainy, or in sunny weather, and after close them up and cover them again, as before. You may also cover each Dwarf-tree either growing in a pot or standing in the earth with a several cap made of wood according to the bigness or spreading of the branches, by which means you may either keep the fruit long upon the tree, or after they are blossomed in the spring time, defend them from the frosts in *May*, and so you shall have many times fruits when other men shall fail and want them.

Pots divided in halves for Flowers.

20. For the forwarding of all the seeds of Pompeons, Musk-Mellons, Cucumber seeds.

seeds, Artichoke seeds, &c. you may procure divers earthen pots of a reasonable bigness, and wel glazed within to be made either of the fashion of Gilliflower pots, or round, upright and of an equal bigness, but let them be made either without bottoms in the fashion of a steeple or else parted into two equal halves, from the uppermost edge even to the centre of the bottom, in the midst of which bottom there may be a hole made of a convenient largenes; upon which (lest any worm should enter) lay a thin flat piece of lead ful of smal holes, through which the water may pass; let the sides of these pots meet so close, as that thereby also no worm may enter to bite

Pots with-
out bot-
toms and
steeple-
wift.

Prever-
tion
of worms.

Ordering
these pots.

bite or gnaw the Seeds ; these pots you may set abroad in warm and sunny weather, or when there falleth any temperate rain ; and, at all other times you may either keep them within doors, or place them in your warm Balneo, *ante num. 8.* and by this means, as I guess, you may have very early and forward Plants, from the which having artificially and workmanly taken the loose sides without loosening the earth from the roots, you may place the Plants with the earth about them, in convenient holes made beforehand for that purpose ; or if you set these divided pots into the earth at the first planting of your seeds, then may you cover and uncover them at

at your own pleasure, which other pots having holes in the tops of them, in the which you may place stone Funnels, whereby to retain the rain that falleth in the night, being first ordered *sicut ante num. 19.* is more fully handled; and when you think that the Plants have rooted deep enough, then you may dig about the sides of your pots, and so gently remove them, leaving the Plants fast growing behinde in the earth. But if your purpose be to plant either Pepper trees, or Colquintida trees, Orange or Lemon trees, Pomgranate trees or Almond trees, or such like, then you may likewise use pots of the same fashion, saving onely that they must

Pots for
Dwarf
trees.

Tubs for
Dwarf-
trees.

Bottoms of
oyled paper

must be made of a far greater receipt, because they are to yeeld a sufficient nourishment to a greater Plant, and that it will be requisite to have four large and strong ears to every pot; although I know that some do rather commend large deep and strong tubs, well pitched or cemented within and without, which may be transported upon great Coulstaves or other carriages. And peradventure it shall not be amiss to have these divided pots without any earthen bottoms, instead whereof you may binde a strong and double oyled paper, having a large hole therein, which may be fast tied about the skirts of your pot with Packthred, which paper bottoms

bottoms may very well decay and rot during the time that each Plant will require for his deep rooting; & if you doubt that the worm will be the rather busie with the paper because of the oyle, then it shall not be amiss to make the oyl somewhat bitter by a decoction of Wormwood therein, and by this means you may easily draw your pot out of the earth, without loosening the earth at all that cleaveth to the roots of your Plants. I could also wish that each of the aforesaid pots should have some small holes in the lip of every pot, especially if they want ears, that thereby thin plated lead might be fastned by small wiers; in which leads, having your Prints for that

Holes in
the lips of
the pots.

D pur-

Leads
with let-
ters hang-
ing at the
pots.

Watering
by a List.

Nourish-
ing waters.

purpose, you may strike two or three such Letters of the A B C as you shall think good, which letters you may always refer to some paper book, wherin you may set down in particular the name of the Seed or Plant, the ordering, the season wherein you set them, and all other circumstances whatsoever, whereby you may learn either to iterate or avoid the like practice the next time. And it shall not be amiss in a time of drought or dry weather, as also in the first sowing or planting of your Simples, either to water them by a list, as appeareth more fully *ante, num. 4.* or else to place every pot in an earthen pan, half full of such water as hath been first infused in dung,

dung, sope-ashes, &c. and exposed a few days to the Sun before you do use it in this manner; for by this means the earth will draw or suck up sufficient moisture at the holes in the bottom, whereby the root shall be kindly watered. Neither is it amiss, as I think, to have shells or pans of earth, wherein to place all your artificial pots, which may receive such rain water as soaketh through at the bottoms of your pots, which water because it containeth the strength or salt of the earth, would be after every great showre returned upon the pots again. But the first and principal care of all other must be to fill your pot with a fat and rich mould, whereof

D 2 there

Euthen
pans to
place your
pots in.

Salt mold
for your
pots.

Refreshing with
new mold.

Backward-
ing of your
Dwarf-
trees or
Flowers.

there is good choice in this small Treatise, which being now and then refreshed with fresh earth at the top and sides by opening the pot, and paring away first of the old earth, and then filling them up again with new, may peradventure give great furtherance to your desires. And if you would have your dwarf-trees growing in the aforesaid pots kept so backward as that they may bear their fruit after all other Fruit Trees of the same kind, then you may in the beginning of the year give them only the morning Sun, or but one hours Sun in the morning, and another in the evening, or else you may place them in shady places, till you would have them to come forward;

forward ; and hereby you may keep your Cherry-trees as backward as you please ; and so likewise if your desire be to avoid the dangerous frosts in *May*, then must you keep these pots, trees and flowers in some close room from the Sun, thereby to defend them from their early blooming , whereby those later frosts being spent before you expose them to the weather , the fruit shall be in no danger at the time of the knitting ; and by this practice you may happen to have Cherries upon your Dwarf-trees when the great Cherry-orchard in *Kent* shall fail. And because every spectator or beholder of these conceited trees may not pre-

Avoiding
of the
frosts in
May.

Hiding of
the arr.

sently look into the invention hereof, it shall not be amiss to make either so many holes in the ground, or so many brick receptacles as will receive your pots all the Summertime, wherein they may be so closely placed even with the ground, and all the brims of the pot so covered with earth, as that they shall seem to be growing ends in ordinary manner, to the great admiration of all such as shall behold them.

The fashion of your Stove for the Dwarf-trees.

20. Your Stove or close Orchard may be made to open at all sides saving the North, in the manner of the shop-windows in *London*, whose board and timber must be well pitched, oiled or greased over with the fat of the powder-

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powder-beef-pot; but then perhaps it will be offensive to your apparel, because it is over long in drying; the roof also may be divided into four parts, and each part so placed as that it may be drawn up with a pulley, thereby to receive the Sun and Rain when you shall think good; and in cold weather, or in the winter season to be kept warm, according to the manner set down *ante, num. 8.* But how to build a house in such form as that the Sun both in the Summer and also in the Winter season may shine therein very plentifully, see the opinion of *Cardanus* cited in the *Collection of secrets*, made by *Wickerus, p. 591.* *Quære* of a round Stove turning on a pin like

Forwarding of fruit by a tent.

Cutting of Vines to bear quickly.

like a Windmil, and being full of glass-windows.

21. A tent spread over a Cherry-tree, or any other Fruit-tree, and receiving that vaporous heat, *ante num. 8.* will help greatly to forward the blossoming and ripening of any fruit, being used in the night time, and in all other sharp and cold weather; all the Art will be herein to have some speedy means of pitching or spreading this tent, and taking the same down again.

22. When you plant the cuttings of Vines, chuse such of the last years shoots as may have some part of the former years stock cut off with them, and so you shall have Grapes a year sooner at the least.

23.

23. *Quere*, if the taking away of the first blossoms of Fruits, will force any Fruit-tree to bring forth new blossoms, and thereby to bear fruit a great deal later; *post 81.*

Nipping off the first blossoms.

24. When you have first prickt in your seeds into the ground, set over each of them a glass which is broad below, and the bottom broken out, and whose neck is narrow, but leave the mouth open; these glasses defend off the cold air, encrease the heat of the sun, and keep the Plants moist; because the water as it ascendeth by the attraction of the sun, so it slippeth down again by the gliding sides of the glass; for I have seen in dry weather, the ground which

Glasses on your young plants.

hath been covered with one of these glasses much blacker and moister then any other earth round about it ; this is done to defend a young plant from the nipping cold , and from the parching heat, until it have gotten up to some growth whereby it may defend it self the better , and then you may remove the glaſs.

Soil for
out-land-
ish plants.

To for-
ward Al-
mond trees

25. Let every outlandish Plant be set in such foil as cometh nearest in kinde to that foil wherein it did naturally grow beyond the Seas ; or if you can, bring over ſufficient of the ſame earth wherein it grew.

26. Steep the Almonds with their ſhels in milk two or three days, then make a trench

trench of good dung of two foot deep, upon which make a lay of fine sifted earth of a hand breadth deep, into which prick your Almonds, then cover them with more sifted earth, and every year remove them, always planting them in the same trenched ground, and so they will grow a yard in heighth every year, as Sir *Edward Denny of Ireland* assured me, upon his own trial; these because they are dainty and shady trees, are fit to make stately Walks in Noblemen's Gardens.

27. For the forwarding of your seeds of Oranges, Lemons, Almonds, Pomegranates, &c. use the same order as is here set down, for Musk-mellan seeds, and then remove

Orange,
Lemon &
Almond
trees for-
warded.

When to
sow that
which you
would
have to
seed.

High bor-
ders of
Time,
Hypop, &c.
speedly.

remove your Plants into pots,
which by apt covers you may
sufficiently defend from all
manner of cold weather, not
exposing them to the air, but
only in a sunny day.

28. Whatsoever you would
have to run to seed apace, sow
that seed either in three days
before, or three days after the
full of the Moon; *quare*, if
the three first days be not the
better; and *quare*, if the day
of the full be not the best of
all other.

29. If you board up earth
to the height and breadth of a
privy hedge that is of fix or
seven years growth with
boards that be thick and well
seasoned, and bored through
full of large and slope holes,
or rather being full of long
slits;

slits ; after the earth is well settled, you may plant the top of the border and sides likewise with Hysop, Time, Lavender, &c. or else you may plant the sides with some contrary Plant to make the one to set off the other the better ; This way you may make dainty Borders of Carnations if you keep the sides cut in frets or other works, planting the Carnations on the top of the borders ; or if you please, you may cut out square holes like checker boards, or fair Roman Letters in poses, or emblems in the sides of the borders, and so keep them according to the works. By this devise you may also make Mounts, Pyramids &c. according to the shape of the case wherein

Sides of
borders in
works.

Checker-
works, Po-
ses and
Emblems.

Mounts,
Pyramids.

An artifi-
cial tree or
arbor.

Dogs, Lyons,
Fowl,
Fish, &c.
artificial.

wherein you plant ; and it will seem very strange being set of such plants as do ordinarily grow very low and near the ground. This way also a man may plant an artificial Tree or Arbor, planting the body and arms of the tree with Herbs or Flowers ; and to cover the secret, you may hide the arms and body with the bark of trees or moss ; as also Dogs, Lions, Bulls, Men, Fishes, Fowle, &c. having hollow moulds for the same, either of stone or wood well pitched within and without : There may be also pipes of lead conveyed through the bodies of such forms, which must be stopt at the ends, and have divers little holes in them, whereby water may be con-

conveyed with a Funnel into the pipe, unto every part of the earth.

30. If it be possible any way without fire or great charge, to have green Okes, Elms, or other Trees at Christmas, then I hold this for one of the likeliest, To graff in the bud or otherwise any of the aforesaid Trees upon the Bay or Holly-tree which seem to have strong and hot sap by their greenness in winter time. If this prove, you may graff and imp in the bud all sorts of Fruit-trees upon the aforesaid stock, whereby you may have most comfortable and dainty Walks in your Orchard or Garden. Mr. *Mas-kalls* Book of the art of grafting, fol. 56. Some commend

Walks of
green trees
in winter.

the

the planting of Fir-trees in Walks, for this purpose.

Iron backs
to your
pots.

31. Quere if it be not good in the Summer and Spring time to place concave backs of iron or tin plates in every pot wherein you have planted either Dwarf-trees or Flowers, and so to remove your pots from time to time as they may best receive the reflection of the Sun, whereby to ripen them the sooner; use the like against your clusters of Grapes. Quere if it be not good to plant Vines in moist grounds in respect of this secret.

A second
crop of the
same beans

32. If you cut down Beans as soon as they have done bearing, and that the year prove a dripping year, you may have a second crop growing

ing from the same stalk that will come late ; this I have proved in my Garden in St. Martins-lane. *Quare of Pease*, otherwise you must water them presently upon the cutting down, and now and then after, as the weather shall give occasion.

33. I think of all waters that are not infused, rain water to be the best of all other to water your delicate plants with, but if for want thereof you shall be forced to water them with common water, yet let the same stand in a great stone or wooden vessel three or four days in the Sun, before you water therewith ; but for the better forwarding of your Fruit and Flowers, you may prove brackish wa-

Seve. sl
waters.

E ter,

ter, *viz.* such as cometh near in proportion of saltiness to the Sea-water, which is one part salt to twenty parts of water, or much thereabouts ; but this may not be used often for burning of your plants ; or rather you may try water infused upon common ashes, or sopeashes, and all manner of dung, or wherein there hath been store of Hay, Litter or some other Herbs infused ; you may also prove Wine, Milk, Wine-Lees, Strong-Beer, and *Aqua composita*, if they be not too chargeable. *Quare* of Sopessuds and powder Beef broth ; *quare* if it be not better also to water your plants with the said water or liquors being made first blood warm, *plus post.* 35.

Quare

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Wine ,
Strong-
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rgeable.
ad pow-
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er your
ater or
e first
obt. 35.
Quare

Quare of the strength or heart
of much earth, extracted by
common water, or rain water,
and then evaporated to a smal
quantity, wherewith you may
water your plants to make
them encrease exceedingly.

34. *Quare* of grafting
Cherry-trees upon Apple-
trees or Pear-trees, and so
generally of all Flowers and
Fruit that may be grafted, if
being grafted upon such kinde
as be late and backward in
bearing, if so the same will
not bear their fruit much la-
ter.

Backward-
ing of
Fruits and
Flowers.

35. About three weeks or
a moneth before their usual
time of bearing, water your
Roses morning and evening
onely with warm water, and
by this means a *Cambridge*

Roses ear-
ly.

Early
Cherries.

man had Roses yearly some twenty four daies before others; *quare* of this practice in all other Flowers, especially the water being first prepared *ut supra, num. 33.*

36. A French-man did greatly commend unto me the applying of unsleakt lime to the roots of Cherry-trees being first made bare in a convenient time of the year, (*quare* if it be not better to sleek it first with water) and this for the forwarding of them in their bearing. *Quare* if one part lime and one part earth, or one part lime and one part horse-dung. This practice destroyeth the Tree in a few years, but that loss is supplied with the advantage in the price of such early fruit. *Quare*

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re of Sopeashes laid at their roots.

37. Lay sheeps dung in soak in water for a convenient time, and water your Artichokes therewith, and it will make them very great : So likewise wil the water wherein dung hath been steeped make Strawberries very large and great ; An antient Citizen in London did use in the winter time to burn the earth from the roots of his Artichokes, and instead thereof to lay in some of his waste Sopeashes, and he found the same to forward them greatly.

38. Slope your Stock upward, and slope your Cions downward, and joyn back to back, binde them together as Colliers do their whips, and

Artichoke
and Straw-
berries to
grow great

A speedy
O chard.

close the joyns with temper-
ed Loam and Moss, or rather
with wax, *ut postea*. 110. This
is called the Whip-stock
grafting, and you may in this
manner graff a whole bow of a
Tree to have an Orchard that
shall bear fruit speedily.

Grapes
growing
late and
kept long.

39. Put the bunches of
Grapes after they are knit in-
to great and apt glafles, ha-
ving two mouthes, holes or
little pipes, the one just op-
posite to the other, *viz.* the
one upward, the other down-
ward, whereby both the wa-
ter and the sun may have is-
sue: And when you fear the
frosts you may stop up the
ends cloſs, and by this means
you may happen to have
Grapes growing upon the
Vines at Christmas; or else
when

when the Grapes are ripe, if you cut off a long branch of the Vine which hath one, two, or three clusters of Grapes upon it, and at either end of the cutting, if you put a Pomwater, and every three days or six days change your Apples, tying a thread in the midst of the cutting, and so hang the same up in a cool and dry place, they will keep fresh a long time. Some thrust onely the stalk whereon the bunch groweth in a sound and lasting Apple, and so hang it up; or else dig a hole in the earth, and lay good store of straw therein, and then Grapes, and then straw again, and over them lay boards, which must be so covered over with sand, as that

Good
wines of
English
Grapes.

no air may enter; and by this means, as I am informed by a stranger, they will last a long time, *vid. post. 109.*

40. I think it not impertinent here to set down a means how we may of our English Grapes purchase an excellent good Wine; and the rather, for that I finde the same to be both probable and possible, both by some antiquities and experiences set down by Mr. *Barnabie Googe* in his Book of Husbandrie, as also by that inevitable argument which he draweth from the same altitude of the Pole wherein we are, and under which there be found beyond the seas most fruitful Vineyards, and which do yield both good and pleasant wines,

wines, as about *Backrach, Col-
lin, Andernach*, and divers o-
ther places in *Germany*, which
have (as he affirmeth in his
Epistle to the Reader) the
self same latitude and disposi-
tion of the Heavens that we
have, whereby is sufficiently
confuted that common,
though erroneous; received o-
pinion against our Climate,
that it should not be hot e-
nough for that Plant ; nay he
proveth further that the wide-
ness to the South is not alto-
gether the cause of good Wines,
as appeareth in that you have
about *Orleans* great store of
good and excellent Wine,
whereas if you go to *Bruges*,
two days journey farther to
the South, you shall finde a
Wine not worth the drink-
ing.

ing. The like is of *Paris* and *Barleduke* (as Mr. *D. Dale* did inform him) the one being southward, with naughty wines; and the other a great way farther to the North, with as good Wines as may be; and thus far Mr. *Geoge*. Mr. *Holinshed* also, in that his painful and commendable History of *England*, doth constantly affirm, That this Island hath been greatly replenished with Vineyards, and that it is not to be doubted but that if the same Plants were by continuance of time, and good ordering of them made familiar with our soil, we should have both full and rich wines of our own growing. And here I have just cause to accuse the extreme negligence, and

and blockish ignorance of our people, who do most unjustly lay their wrongful accusations upon the soil, whereas the greatest, if not the whole fault justly may be removed upon themselves. For whereas neither in Pasture nor arable grounds they look for any great or continual encrease without all the due and necessary circumstances of Husbandry be performed to the same; yet in Vines they onely expect a plentiful Harvest (or else they condemn the soil) although they bestow no other manuring, prouining or ordering of them, but only cut and prouin them in the 12 days, and that very careless, & without any due regard or choice had of the branches which should

should be taken away close to the stock, and which should be cut off between the third and fourth joyn, and maintaining as well the waste and sucking roots, as the principal and master roots which ought most chiefly to be cherished and preserved. But because this matter requireth a large discourse, and for that Mr. *Barnaby Googe* hath very sufficiently handled this subject already, I will refer you to his labors, by which you may learn both the election of your soil, and the best scituuation therof, the planting of your Sets, the prouining both of the Stock and Roots, the turning and translation of the ground, the choice of the best and aptest dung for them, with all other necessary

ry circumstances requisite to the Plant, unless peradventure there may be some few observations else to be learned, either at the hands of an experienced French Gardner, or that you shall think good to put in practice some one or other of these few conceited helps for the better forwarding of them in this our cold Climate; onely I have thought it necessary for the avoiding of all French and Spanish objections, to set down a new, and yet a most assured and undoubted course how to furnish our selves with such store of good and perfect wines, as that we shall not need either to be beholding to the Frenchmen our doubtful friends, or to the Spaniards our

our assured enemies, for this sweet and delicate kinde of liquor ; always provided that we use some careful means at the first to store our selves with the right and natural plants of those Vines, whose wine we desire to have ; for the bringing over of which plants from beyond the Seas, if we cannot otherwise furnish our selves of them within our own Continent, we may use that pretty ingenious help for the carrying of our Sets being well covered with earth, and conveyed into close vessels, as Mr. *Googe* in his aforesaid Book hath in plain terms disclosed. Then supposing all the skilful experience of *France* to be first shewed and performed in our English Vine-

Vineyard, and that yet notwithstanding there wanteth a sufficient and perfect digestion to bring the Grape to his full ripeness and maturity let us according to the French manner press out their sweet and pleasant juyce such as it is, and by sufficient decoction and ebullition bring the one moity thereof to the fulnes of a cute, which being cold, we may well mix with equal proportions of the crude and raw wine, or so proportion the same as it may be most pleasing to our own mouths, leaving them to the weather till they have inseperably united and incorporated themselves together; and this is no strange practice, but onely drawn from the Spaniard and the

the Greek who cutteth both his Malmseys and Muscadines, and for the most part also his Canary Sack both to make them last the longer, and also to be more fuller of wine. Neither are we here to be discouraged at the charge of fire, or the wasting of that faint flegmatique liquor that must of necessity be used in this work, for that (if every acre of ground will yield 700 gallons of wine, as *Cato*, *Varro*, and *Columella* do testifie, or as the Vineyards of *Seneca* did yeild with trade a Thousand gallons upon every acre) I think we shall pay our selves with a higher interest then the Statute of 13 *Eliz.* will allow. Yet because I will not altogether hover

persevere in *Vestigis patrum*, I have thought good to set down another course out of mine own experience, whereby (if we shall be forced to use any outward helps in the default of our Soil or Climate) we may yet by Art supply that unto our selves, which nature hath denied to perform of her self: Then having first expressed such liquors as our English Vines being well ordered will afford, let us to every gallon thereof add one pound of the best Rasins of the Sun, or Malaghie Rasins first washed in some change of waters; or if you will aim at a Canarie Sack, then chuse the best of the *Xanthe Currens* you can get, being well cured and conditioned, and take a like

proportion of them to each gallon of your crude wine; leave them in this infusion or imbibition, until the liquor have extracted both the tincture and strength of the fruit; then draw the wine from the fruit, and when these two liquors have in time wrought themselves into one body, they will become a most pleasant wine, either resembling the Bastard, the Muscadine or Canarie Sack, either to be drunk alone, or serving to compas or tast any other wine withall, according to the proportion of the fruit which you infuse, and according to the workmanship which you shall shew therein; for herein I am assured that I have given light suffi-

sufficient to an ingenious Artist, both to check and mate all those brewing Coopers and Vintners of our age, who rise early and work late in their grofs and jumbling flights and apparelling about their wines, when as it were much better both for the credit of their houses, and the health of their Customers, if they spent that time in their beds which they spend in their Cellars at midnight. But it shall suffice at this time, that I have broken the ice into a harder passage, and that I have given a taste of some new skil, which I will be ready to enlarge and amplifie as well in this subject as in others of higher reach, when I shall see men of worth and special de-

sert to be distinguished from the vulgar sort by their honorable reward, till which time I will leave Nature in a sweet slumber; *Sed nunc ad oppositum.*

Young
Onions all
the year.

Young Ra-
dishes all
the year.

41. If you sow onion seeds every moneth in the wane of the Moon, and in cold weather, if you steep the seeds in warm water, and sow them in earth well dunged in pots, and remove the pots into close rooms in cold and unseasonable weather, you may by this means have Onions young and fresh growing all the year, as a Gentleman of Ireland did credibly inform me of his own experience. Quare if young Radishes may not be had in the same manner.

42. If

43. If you cut a Red or Damask Rose root on Mid-summer day, between eleven and twelve of the clock before noon, at Christmas it will bear Roses. Note that you must defend them from cold weather by covering them all over with straw. *Quare* if this secret may not be performed best in such Roses as grow in pots or tubs, because they may be best defended from all injury of frosts, by removing them into close places.

Roses
growing at
Christmas

43. Towards cold weather you must cover with some well tempered loam (as with horse-dung or flocks, but I take flock to be the better) all the stalks of the Vine, even to the bunches of Grapes, covering

Grapes
growing
late.

ing the banches themselves with straw, and so you shall have your Grapes growing upon the Vine at Christmas. *Quere* if this secret serve for any other Trees. Note also that your vines must be opened three times in the year, and be dunged with some apt soil for them.

Rich earth
for pots.

44. Take the earth that you shall finde under an old Muck heap, but dig not too deep; this alone is an excellent mold to plant your Gil-liflowers and other Flowers and Dwarf-trees in; but if you mingle therewith both lime and dung also, and temper them well together, it will be a good means to forward such Flowers as you shall place therein, but you must

must not set your pots in the South sun. *Q*uere of planting each Flower in its own putrefaction with earth, or in the putrefaction of Corn or any other Vegetable. See more at large hereof *porta* pag. 100.

45. Some by cutting down of Artichokes presently after their bearing, gain also a second crop about Michaelmas or Alhallontide, if the weather prove not too sharp, because the Plant is tender; or else after they have done bearing you may cut them often, if you will lose your second crop of Artichokes, and content your self only with such stalks as will spring from time to time, and be very good meat being tenderly sodden.

A second
crop of
Artichokes

When to
sow seeds
in resp. &
of the
Moon.

Hindering
of the
Collesflow-
er in blow-
ing.

Salt to for-
ward Pease

46. All such seeds as you would have to run to seed again, must be sown in the three days before or after the full of the Moon, or at the full, and these will be forwarder then those which be sown three weeks before them in the wain of the Moon, as some Gardeners do hold.

47. When your Cole-flower is almost ripe, cut it off, leaving a pretty long stalk at it, prick the stalk in the ground, and by this means the flower will be somewhat long before it blow, and so you may have then one under another, as you shall have cause to spend them.

48. *Q*uare of sowing of two bushels of salt amongst four

four bushels of Beans or Pease what effects it will work either in forwarding them, or in the enriching of the soil, especially being oftentimes strewed; for I have been credibly informed that the like proportion of salt amongst seed-corn will multiply the encrease thereof exceedingly.

49. Plant many Dwarf-trees, and bow down their branches with their fruit upon them, including the fruit And *quare* how long the fruit will keep; you must have party coversts to your pots, and well luted.

To pre-
serve fruit
upon dwarf
trees.

50. *Quare* of striing of seeds in water wherein some Sandiner is first dissolved. *Quare* if one sixteenth part be not a good

A fruiti-
fying water
or feeds.

Lemon,
Orange,
Pomgra-
nate tree.

Late fruits

good proportion, for that cometh near unto the salt wa-
ter, wherein there is some eighteen or twenty parts of salt. Quare also of watering all outlandish Trees, as Lemon, Orange, Pomgranet, &c. therewith to forward them in their bearing. Quare also of a strong Lee made of the waste Sope-ashes. *plus ante num. 33.*

51. Some do hold that if you nip off the blossoms in the midst with your nails when they do first bud forth, that new blossoms will afterwards break forth close by them, which will come later then the first. Quare of the like practice upon those new blossoms likewise, *ante num. 23.*

52. *Quare* what will follow by the declination of the branches of Roses and other Flowers into pots either empty or half full of water, and standing within the ground.

A practice upon Roses.

53. *Quare* of throwing all the sope-suds, and all the Powder-beef-broth at the roots of Cherry-trees, and other Trees, what effect will follow, and so of flowers.

Sope-suds and Powder-beef-broth.

54. Lop no tree in wet weather, neither cut down any Herbs in a rainy day, but in necessity. *Andrew Hill.*

When to lop or proin.

55. *Quare* of steeping shavings of horn a long time in water, and after watering of Trees or Plants therewith.

Shavings of horn.

56. *Quare* of laying of store

Horn to Cherry-trees.

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f the
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num.
52.

Pease for-
warded
with horn.

Taylors
shreds.

Horn into
a gelly to
forward
fruits.

Rose-trees
forwarded.

store of horns at the roots of
Cherry-trees, &c. if they will
forward their bearing.

57. What shavings of horn
will do in forwarding a Pease
field, or in forwarding of out-
landish seed; but especially
sow early Pease, such as Mr.
Flower soweth by *Bednal-
green*.

58. Taylors shreds laid
upon the ground will enrich
it greatly.

59. If you steep shavings
of horn in water and lime, the
horn in time will grow to a
gelly, then may you drein a-
way the water, and apply the
same to the roots of Trees or
Herbs, without discovering
of your secret. I have heard
them much commended in
forwarding of Rose-trees.

60. The branches of all Trees must be cut off in setting time, except the Peach tree, from which you must onely take away the dry branches. *Ex veter. lib. manuscr. pergam Th. Gaf.*

When to
prune trees
Peach tree.

61. When you plant any tender Tree, as the Apricock or such like, place it if you can against a pale or wall, and till cold weather be past, cover the same with a close cloth every night, rolling it up in the day time when the sun shineth, or when the air is warm and temperate.

Young
plants cov-
ered with
a veil in
the night.

62. In the planting of every young Tree or Bush, pour in after it is set a gallon, two or three of water after it, to make it root the sooner.

Roots of
young
plants well
watered.

When to
gather fruit

Cropping
of trees.

Enriching
of corn-
ground
with salt.

63. Gather your Apples when the weather is dry, and also in the waining of the Moon, and that will preserve them greatly from rotting; *quære* if that be not general in all fruit.

64. When you cut off the head of any Tree, either to graff upon or for fuel, leave one branch near the top for the sap to run up upon, for fear the tree perish.

65. If you scatter three bushels of bay-salt upon arable ground after harvest, you may sow four times barley upon the same ground, and gain rich crops; *quære* of a fifth crop. *Probat. at Cheswick per Mr. Phil. Herb.*

66. The

66. *The whole manner of planting and ordering the Musk-Melon, Cucumber, Pompeion, &c.*

Get a load or two of new horse-dung, wherein there is good store of Litter, and such as is not above seven or ten days old, or not exceeding fourteen, and which hath been laid still upon a heap, as it was taken out of the stable; dig a pit that may be fit to receive the same, and ever as you lay any reasonable quantity thereof, tread it down as hard as you can; then sift about two inches thick of fine mold upon the dung, and prick in at every three or four inches a Musk-melon seed (which must

must be first soaked twenty four hours together in milk) stake this border of dung and earth round about very thick with sticks or forks that may appear above the ground some four inches in heighth, and upon these sticks lay hurdles or lathes or other twigs, so fastned together as that lying upon the sticks they may cover all the Plants over; upon these Hurdels lay good store of straw, *viz.* so much as may be sufficient both to defend the cold from the seeds, and also to keep out a reasonable shoure of rain if it happen to fall before the removing of your plants. Let them so rest for twenty four hours, and then you shall see them peep above the ground, and if

if the weather be open, and that the Sun shire, give them for seven or eight days after two hours sun at the rising, and likewise at the setting thereof every day, by removing away the Hurdels with the straw upon them; then if the weather have been warm and that you see that every Plant hath gotten three or four leaves, you may remove them, taking also sufficient of the earth and dung that grew about each Plant with it, not loosening the root at all; then set these Plants in holes made of purpose, so as they may stand about six inches within the earth, that thereby you may cover them and uncover them as before for five or six days; and if they hold out

G so

so long, then are they past all danger, unless some storm of hail happen to beat upon them ; but to avoid all danger, I think it not amiss for three or four weeks after they be removed, to keep them covered with empty pots as before , both night and day, saving that in fair days you may acquaint them by little and little , more and more with the Sun, in cold or gloomy days not uncovering them at all. Now when they have shot out all their joynts (which you shall perceive when you see a knot at the very end of the shoot, which is somewhat before the flowvering time) then must you cover every knot or joyns with a spade or shoveltul of earth, and thereby

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by each knot vvill root, and put forth a nevv shoot ; (*qua-
re* of the same order in Cu-
cumbers , Pompeons) by
vwhich means you shall have
great encrease of Mellons, as
perhaps tvventy five or thir-
ty rising from one Plant. But
if in twenty four hours space
your Plants do not peer above
the ground , then you must
water them in the heat of the
day , and your water being
pretty warm ; and *quare* if
some of those waters, *ante
num.33.* be not good for this
purpose ; *quare* also of salt or
urine which are thought of
some to be a very special good
means to keep a dungbil a
long time hot for the digesti-
on of Chymical work. You
must not forget to water

these young Plants often, at which time you may prove either common water, or first infused in some rich soil, and then warmed before you apply the same; *quare* of bestowing of scope-ashes about their roots. When your Mellons are as big as little balls, then if you nip off the shoots that are beyond them, they will grow exceeding great; for then the sap doth not run any more to waste. Note also that this fruit desirereth to be kept from moisture, and therefore you must use to cover them with broad leaves from the rain. Some be of opinion that all the art before set down for the speedy obtaining of Plants is needless, and that if you do only

only let a few Musk-mellons shed their seeds as they grow, that so they will be much forwarder then by this device. *Sed quare*, if it shall not then be very requisite to cover and defend them from all the injury of the winter frosts, which the tenderness of that Plant will otherwise very hardly bear or indure; *quare*, of Ridge-tiles, or other Cilinders of clay or tin plates to set opposite against the Sun, and close by their roots, in such sort as they may receive the reflection of the Sun upon them to hasten their bearing, which you must remove in the afternoon, opposing them still towards the sun, so as the Cilinders may at no time in the day shadow the roots;

but then it will be also necessary to water them continually with dropping lists, lest the excessive heat of the sunbeams should make them to parch and wither. See all this more truly set down in my last book of Gardening, *fo. 8. num. 18.*

Speedy ar-
bois and
green in
winter. --

67. The Beech-tree groweth green continually, and therefore most apt to make pleasant Arbors for the winter also. See *Googes Husbandry*, *fol. 101.*

Delicate
poys for
arbors

68. Beech-trees or Birch-trees make an Arbor speedily, and so likewise of the Jesamy, and of the Pompeon Plants, but they grow not long green; *quare* of French-beans.

69. In this manner you may have most delicate Carnation

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nation or Gilliflower pots ;
Cause pots of eighteen or
twenty inches heighth, and of
a good breadth to be made in
what fashion you will, with
two ears East and West, and
two pipes North and South,
at the which you may water
your Flowers ; let the pipes be
full of little holes at the enter-
ing into the pot, and let your
pot be made full of holes at
the sides, each hole distant
one full inch from ano-
ther, in the which you may
plant Tyme, Hyssop, or small
Lavender, and as it groweth
keep the same even with cut-
ting, or you may leave some
part of the Herbs to grow
longer then the rest, to make
thereof Diamonds, Frets, &c.
In these pots you may plant

G 4 Roses,

Roses, Carnations, Lillies, &c. or you may have your pots made in the shape of Flower-de-luces, round Balls, Diamonds, &c.

70. How to prevent the common error, whereby every second year is made more unfruitful than otherwise it would be of Apples, Pears, Plums, &c. by the negligence of man.

Preserving
the Bud.

This is done by the careful gathering of your Fruit; for almost every Apple, Pear, Plum, &c. when it is ripe hath a little pin or bud hard by it, which the next year would be an Apple, Pear, or Plum; and therefore in the gathering of your Fruit, you must have special

Special care to pull them off so, as you hurt not the bud, which is easily done if you break off the Pear, Apple or Plum from the bud, and not toward it, whereby to hurt it.

71. *How to keep Plums from cleaving, and so of Flowers.*

This is done by the opinion of some by wreathing onely of the bows or branches whereon they grow. Quare, if this or any such like means will help where Carnations or Gilliflowers do use to break the Cod.

72. *How Flowers and other Dwarf-trees that root deep, may notwithstanding be forced*

ced to grow in small pots or wooden vessels.

Quere if this may not be done by planting them in pots that be divided in halves, in *ante num.* 20. or such as be made steeplewise, whereby the earth and plant together may be uncased, and pared away at the sides and bottoms, and supplied with good and fresh mold, and by taking away all the superfluous ragged roots thereof, and cutting of the master root the shorter. For the only let as I imagine, that should hinder great Plants from growing long in smal vessels, is because the root cannot have room and deep enough to grow in; as also for that so small a quantity

quantity of earth cannot give nourishment enough to so great a Plant; without some y early helps.

73. *A special order for plant-ing and ordering of all Or-chards, whereby your Trees shall flourish exceedingly, and bear store of fruit.*

Some hold opinion, That if the ground be moist, then the shallower you set the Trees, the better they will prosper; but if the ground be dry, then the deeper the better; but I have heard it very confidently affirmed by a Gentleman of good judgement, and great experience in *re rustica*, That all Fruit-trees would be placed even in the summity of the earth, so as their roots may onely

onely be well covered with earth, by which practise he hath seen a Tree that grew deep before, removed and planted in this manner, which bare his full burthen of Fruit in the first year of the transplanting thereof; and by this means every ground that will carry a good and rich sward of grafts, and being onely two foot or eighteen inches of good earth, will serve to make a most fruitful Orchard, wherby that erroneous conceit (that it is impossible to have a prosperous bearing Orchard where a vain of gravel lieth within two foot of the turff) is utterly confuted and reproved, which would be a very joyful and welcome secret to a great number of our English

English Gentlemen and others, who notwithstanding their great charge in laying in of infinite store of earth upon their Backsides, can by no means procure a good Orchard to themselves, and that onely by reason of the deep setting of their Trees, which (how good soever the earth be) doth greatly hinder them and keep them back both in spreading and fructifying; the reason whereof is apparent to every young Novice in the Schools of Philosophy. Now because these shallow-rooted Trees will be in some danger to be overcome with the high and boisterous winds, it is therefore necessary to set them about Alhallontide when the ground being moist and

moist and supple, and the
dripping season of the year may
fasten and knit the earth unto
them; and for their better
stay, it will be requisite, that
every tree have a sufficient
prop to support it; all such
grafts or other weeds as grow
about these trees must either
be weeded out or pared away,
that there may be no Plant at
all to draw any of that vegeta-
tive salt of the earth from the
roots of the Trees; this grass
may be laid in some fit place
till it be putrified, and then
returned again to his first
place. And because in hot
Summers and dry weather,
these Trees that shall root thus
near the superficies of the
ground will be apt to parch
and burn away, unless there
be

be some moistning means used to the same ; I would therefore advise that there be some pretty store of pease-straw or Fearn laid about the bottom of each Tree, which being now and then well moistened with water, if the season happen to be dry, will keep the roots wet enough, and defend them from the scorching heat of the sun, or else you may wet them with a dropping list that may distill even through the straw or fern unto the root. *Quere* if that Vines may be used in this manner. These Trees may be succored and relieved now and then with some fresh mold, whereof a smal quantity will serve, because the roots are so near to the uppermost crust

crust of the ground; here I think Sopeashes would serve to good purpose.

74. *The just time or ipsum nunc, when it is best to graff, both in respect of the Cions, as also of the Stock.*

The Spring time of all other is the most proper and apt time for grafting, because then Nature being stirred up by the strength of the climbing Sun, doth force the sap to ascend into the uppermost part; but because this season of the year is subject to much alteration, either by excessive moisture, or too much drout, and sometimes by the sharp and nipping frosts, that often do kill, and many times do stay

stay and hinder the first putting forth of Vegetables. I have therefore thought it good for the better certainty of thy election and choice of times, to shew thee some undoubted way how thou mayst understand Nature herself speaking in this point by undoubted and demonstrative signs unto thee. And therefore when thou shalt perceive that she beginneth to thrust forth those little red buds, which give the first hope of encrease unto thee ; then, I say, and before those buds do break out either into a green colour, much less into leaves, thou must assure thy self that thy Cions is ready to be taken off, and grafted in such a stock, as hath also buds of the like

H colour

colour and bigness unto them, by which means they will so jump in a sympathy of Nature together, as that they will most lovingly and kindly embrace each other. And note, that the stock must always be as forward at the least as the Cions ; for otherwise the Stock will starve the Cions.

75. *The manner of implastering, Inoculating, or Graffing in the bud, with all necessary circumstances.*

In some smooth part of the Stock whereupon you mean to graff, you must first slit the bark about half an inch overthwart the body or branch ; then slit likewise the bark thereof downward from the midst

midst of the overthwart slit somewhat more then an inch in length, into which convey your bud with the leaf at it, so as you place bark to bark at the upper end, and croping of the uppermost part of the leaf; then binde the bark of the stock about the bud, with such bands as are commonly used in the binding up of Brawn, and close up the joynt with Loam and Moss well tempered together; at three weeks end you must take off that band, because the bud will swell, and then you must binde the same again more easily with a new band; but some do hold it sufficient to slit the band only in the back-side, and so to leave it. Note that in the gathering of your

bud you must be careful that you hurt not the bud in the inner side of the bark, when you divide the same from the branch whereon it grew; for if you finde any hole or pit therein, it is a manifest sign that you have left the bud behind; for the avoiding of which danger, the best way of all other that ever I could finde was, to slope the bark a little upward in taking off the bud, and to slit down at the sides and bottom thereot, so as it may be a pretty large square, and then putting in your finger gently at the upper end to draw the same downward, as you would slip off an Eels-skin; this bud you must place in a square hole cut out of purpose for the same,

same, and fitting bark to bark as near as you can in every place. Some in gathering of the leaf with the bud do make an overthwart slit a little above the leaf, which leaf would be such a one as bath a fair swelling bud by it; then they slit the bark on either side for the leaf, and so make the same to meet in the base point in form of an Echocheon. Some do hold the best time of this grafting to be about the midst of *June*, or few days before or after; and some about the twelfth or fourteenth of *June*, but you shall finde out the best time of all for this practice by the sappiness of the Tree when you slit the same, and by the smooth and easie divi-

viding of the Bark from the Tree. If your bud take well, then must you cut off the stock or branch whereon you have thus grafted about the end of *December* a shaftment about the bud, and when the bud hath afterwards given a sufficient shoot, then may you take off the branch or body whereon you grafted close at the bark of the bud, sloping the same upward with your knife: When you go about this work chuse a fair, milde and temperate day, and shun all rainy and windy weather. Note also, that after you have taken off your buds, and untill you have fitted them in their stock or branch, you must lay them in a sawcer of fair water to keep them moist, and

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and graff them as speedily as you may. Cut the bands in funder in the backside about three weeks or a moneth after you have grafted ; close it at the first with wax besides the bands, let the schocheon be rather a little too big then any thing too little, especially at the bottom for his place, because it will shrink, and be sure you close your schocheon well at the bottom ; and so likewise in the grafting of a Cion. By this Art one smal twig well chosen, and being full of buds will serve to graff sundry Trees, and it is not amiss to graff in divers places of the same Tree, if some should miss ; for this grafting, though it take not, doth not any way impair or hurt the

H 4 Tree.

Tree. Graff Apple-tree-buds upon Apple-tree-stocks, and so of Pear-trees; and Stone-fruit-buds upon Stone-fruit-stocks. *Quare* of grafting one Rose upon another, or upon any other Tree or branch. *Quare*, if the bud would not be grafted in a shoot of the same year. In stones Fruit it is thought better to graff upon a shoot of three years old at the least; but in Pear-trees or Apples you may graff this way upon a shoot of one year. Prepare your stock first, and presently apply the bud; for it is a rule in all grafting whatsoever, the sooner that you close them, the more ready they will be to knit together, even as a piece of flesh that is newly cut, being presently bound

bound up will heal more speedily, whilst the vital spirits be yet warm.

76. *How to sow sufficiently in the wain or encrease of the Moon, notwithstanding the unseasonableness of the weather.*

It is a common received opinion at this day, that it is necessary to sow all seeds which you would have to run to seed again in the encrease of the Moon, except Beans and Pease, which must be sowed in the wane of the Moon, the nearer the change the better; and so likewise to sow all such seeds as you would have to bring large roots, and not to run to seed in

in the wane of the Moon, as Parsenips, Carrets, Radish, and generally all Pot-hearbs; now if either the wane or encrease prove so wet and showry, or so cold and frosty that you cannot conveniently sow your seeds in their due season, then mingle well together each seed with a sufficient quantity of fine and rich mold, and leave them so together in pots, pans or dishes, till you finde apt weather to sow them abroad; and so you shall not be forced to lose any season at all. *Quere* if all these pots or pans were set in a stove or other warm place, if so the seed would not be much forwarder then if they had been scattered abroad. Or else you may sow them, the earth

earth being moist, so as you provide sufficient store of dry mold or earth to cover the seeds.

77. *How to have Garden Pease or French-Beans to grow without the help of sticks or poles.*

Set one row of Beans, and another of Pease some five or six inches asunder, and the Bean stalks will outgrow the Pease, and be strong enough to support the Pease; your French Beans you may prick round about your Trees in your Orchard, suffering them to climb up by the bodies, and if need be you may binde them to the trees with rushes or some such gentle bands.

78. How to destroy weeds, worms, rushes, &c. as also to enrich any pasture or arable ground, and perhaps to forward the Crop thereof.

This is done first by plowing the ground twice, and then by sowing of the waste Sopeashes in some reasonable quantity upon the ground after it is sown with grain in the winter time; two load or three load of them will serve an acre of ground very richly: *quere*, what effects will follow in the forwarding of Pease or any other grain or pulse, if the same be bestowed upon ground every two moneths; If this fall out, then imagine how profitable it were for all such

Pease and
beans for-
warded.

Weeding
of Woad
saved.

as

as sow any store of Woad ; for by this means they may save an infinite charge in the weeding thereof, which now they cannot avoid ; some think that salt is of equal force with sope-ashes in all these purposes ; and that two bushels will suffice for an acre of ground , being mingled with the grain in the sowing ; and that thereby you may hav yearly a rich crop of Wheat in a barren ground.

Quere, if Broom or Fern may be destroyed by this means. I make no doubt of Broom if the ground were plowed and then the ashes strewed thereon ; there is no doubt but that these ashes will also be very necessary for the enriching of Garden grounds.

Broom and
Fern de-
stroyed.

79. *How to stay the bleeding of any Vine.*

This is done by binding the ordure of a man that is somewhat dry or stiff in a linen cloth, close to the place where it bleedeth, with some packthread or other bands ; this I learned of an expert Gardiner. *Quere* of the dropping of melted brimstone upon the place, or wax and Turpentine, Pitch, Rosin and such like. Also if you sear it with a hot iron, and drop tallow thereon, and then binde the bark hard with divers folds of cord or Packthread about , this will stay the bleeding thereof ; experienced per Mr. Hill.

80. How to have great and large
Musk-mellons, Cucumbers,
Pompeons, Gooseberries, &c.

When your Pompeons are as big as little apples, then nip off all those young shoots that grow beyond them, by which means a Gentlewoman of her own experience did assure me, that she had Pompeons as big as a gross woman in the waste; the same may be done in Cucumbers, and Musk-mellons, as soon as they are grown to some little bigness. So likewise by nipping off the tops that grow beyond the Goosberries presently after they are knit, she had exceeding great Goosberries. *Quare* of the like practice

Nipping
of the
young
shoots.

Pompeons.

Goosber-
ries.

Apples,
Pears,
Cherries,
Grapes to
grow great.

Pompeon.]

practice in Apples, Pears, Cherries, Plums, Peaches, Grapes, &c. Quære also if there be any use of this secret in Flowers. Some commend the taking away of all the Runners except two or one from every pompeon, whereby more sap may be conveyed into the Fruit.

81. *How to destroy Fern or Broom.*

So soon as it is ready for the Sithe or Hook, cut it down, and continue this practice two or three years together, and in the end, the sap wanting issue will choak the root; according to that opinion it is likewise held in the destruction of a Tree, by taking

taking away all the sprouts and buds from time to time, as they put forth at any of the branches. Quere if this practice will not destroy Broom.

82. *How to make the leaves, stalks and roots of Artichokes to be good food for the Table.*

The roots of all young Artichokes, as I have heard some Travellers report, be in a manner as sweet and delicate as the Potatoe root, and therefore to have store of them, I think it requisite to sow whole beds or borders of them; and if you will make use of the leaves, you must whilst they are young, *viz.* before they do carry any ap-

I ples,

bles, binde all the leaves in one mass together, and then bury them in the ground, and so they will become both sweet and tender; and this is a practice very usual in *Barbary*. Or if by cutting down the stalks you prevent the bearing of their fruit, you shall have their stalks full of strength and food, and to make pleasant Sallets withal, and that oftentimes in one year. Also if you cut them down presently after their bearing, you shall have young Artichokes towards Michaelmas, if time or season be any thing mild and temperate.

83. How

83. How to make flowers double,
as also to enlarge either fruits
or flowers, and to make young
trees to prosper well.

This is thought to be best performed by often removing the young Plant (and as some will have it, in the encrease of the Moon, or rather just at the full) and so likewise of Dwarf-trees. *Quare* whether the removing of a stock before it be graffed, or after it be graffed, be the better way to make the Tree to prosper, and whether it be not good for the encrease thereof, to remove and transplant it often whilst it is young.

84. *How to defend a whole Orchard, or any particular Tree from the frosts of April or May, whereby the blossoms may knit without any danger.*

If you can happen upon a place defended, either by a hill, or some rows of high trees already growing, from the North and East winds, then shall you not need to shew any other art, for that your Orchard having this defensative, is very likely to prove fruitful if there be no other impediment in the soil. But if you cannot be so happy to finde a place so guarded to your hand, then plant on the East and

and North side thereof a Quickset-hedge of Hathorne, which will grow to a reasonable height in a short time, without the which you may also set a ranck or two of Elms, Ashes, or Sycamore, to break off the cold blasts from your Trees. But if by chance you have any wall already built, with two sides against the same wind, that will be a special good corner to set an Apricot-tree therein. Or if you are desirous to defend the blossoms of some few Trees from those cold winds, whereby to have store of fruit when others shall fail, then must you strein Canvas on the East and North side of them, until all cold weather be over-blown,

I 3 and

and so you may have Cherries, Peaches, Apricocks and all other early fruit, when the rest of your Neighbors may happen to want : And this Canvas will be afterwards as serviceable for the Painter as any other , and so you shall reap great profit with no loss at all. But this practice fitteth an Orchard that consisteth of Dwarf trees most excellently, as also a Garden of dainty Flowers that may be couched together under such an Artificial wall. But if your Plum-trees do grow against a wall, then may you hang a sheet or piece of canvas only over them every morning and evening.

85. *How to make the best choice
of any Cions whatsoever.*

Chuse that twig which you see to put forth as many or more buds then the rest of the Tree, and which seemeth best to prosper in your eye.

86. *How to recover an old Bor-
der of Tyme or Hysop that
is almost dead.*

You must cut the same down very low at a convenient time, and if you can after some present rain or against a showre, and then earth the same presently, by sifting earth all over the borders with a long and flat Sive, made for that purpose, which being

in some measure answerable to the breadth of your borders, will be much apter for this purpose, then those round Sives that are usually employed in this work, whereby much earth falleth into the Alleys of your Garden.

87. *How to know the just time when to remove or transplant any Tree.*

When the leaves begin to fade colour, and wax yellow, then is the fittest time of all other to remove them, if you would have them to root well, and bear speedily.

88. *How*

88. *How a man may have a speedy bearing Orchard, but the trees not beautiful, or to have fair and goodly Trees, that will not bear Fruit so soon.*

Prick in the kernels of Pippins, Pears or other Fruit in your Nursery (which Nursery would be always a worse ground then the Orchard wherin you must afterward remove them; for otherwise your trees will not prosper so well when they are transplanted:) and after they be of three years growth, *viz.* about the bigness of your little finger, you may graff them either in the stock or in the bud; these young graffed Trees being afterward

terward removed into your Orchard, consisting of a good fat mold, will bear fruit very speedily, but thereby they will be hindered from being fair and mighty Trees, like a woman that beginneth soon to teem, whereby her growth and spreading is much hindered; and this is an approved way to have a speedy Orchard. But if you desire to have an Orchard consisting of fair and beautiful Trees, but three or four years more backward in bearing, then plant your Orchard at the first with Crabstocks, and when they are able in any one year to put forth a shoot of two foot long at the least, then are they fit to be grafted, and not before; these stocks being thus grafted will

will spread into goodly high and large Trees, but not bear so soon as your other Trees any store of fruit. And thus you may make your own election which manner of Orchard shall like you best.

89. *How to make branches or Arms of Trees to root.*

If any Bough of a Tree do put forth a great number of warts or little knots in any place, saw off that Arm or Bough one inch below those warts, and prick it into the ground, and it will root and become a Tree.

90. *How*

90. How divers Trees and Hedges are kept backward by the ignorance of him that planteth them only.

When a Privie Hedge is laid too late, as in *February* or *March*, it will never come forward or prosper greatly; Yea, I have heard a man of good experience affirm, that if this year in *March* a Privie Hedge be laid, and another about *Alhallontide* the next year, that the later hedge in seven years space, will gain three years growth or spreading of the first; the like is to be thought of all Trees.

91. How

91. How to make the body of a Tree, or any young Cions to grow full of squares or Losanges.

Slit a tender young stock, or a shoot of six years, when it is of some reasonable length, about one finger or six inches in length, and in the midst of the slit overthwartwise place a short stick that by thrusting out of the sides may make the form of a Losange, the inside whereof must be covered with tar, and in time the bark will cover the same, and thus you may have a Tree full of Losanges, and one square made contrary to the other, whereby your work may seem the stranger.

92. *How to bring Fruit into any shape, or to grow within molds.*

This is done by clapping of party molds having vents upon young Pears, Apples, &c. which have such forms and portraitures within as you like best; I think leaden molds, or molds of burnt clay to be the best and cheapest of all others. You may also put in young bunches of Grapes into little stone pots or glasses made of purpose, having vents in the top (for I think otherwise they will distil with the heat of the sun.) *Quare* of putting of water in the molds, so as it touch not the fruit, to make the Grapes to

to swell. *Quare*, if leaden molds be not the best of all other to ripen Grapes; *quare* also if these molds being well luted towards Winter when the Fruit is ripe, if so the Fruit will not hang a long time upon the Tree notwithstanding all frosty weather.

93. *The best manner of binding or closing of any new graffed Cions.*

First let in the Cions of a good depth into the Stock, so as if it take not in one place it may take in another, then bind the same about with such bands as they use to bind Brawn, and cover the band and slit all over with wax (green wax I have seen to take good

good proof this way) for loam will chop in dry weather, and let in both wind and rain which wax will not ; and loam by its hardness bindeth in the sap too much , which wax doth not hinder at all by reason of its softness and plian- ness in warm weather, through which, even the buds by help of the sun do easily break.

94. *To backward Flowers, as Gilliflowers, Pincks, Straw- berries, &c.*

Quere, if by covering them over with some earthen pan with wet straw or hay about it, they will not be much hindered ; removing the pot but one or two days in the week to take the sun , least they wither away.

95.

95. Necessary Observations to
make either outlandish or
English seeds to grow the
better.

If you can take the advantage of a hard frosty winter, which hath mellowed the ground well, and made the earth to crumble ; and then if it be also dry in *March*, that the mold may fall to fine powder in the digging thereof, and that your seeds be sowed and well covered before it rain (if the infertility of the ground hinder not) you shall be in good possibility of a rich crop. I did sow some *Staves-ace* in a place whose mold was cast up in wet weather, and consisting of earth

K and

and clay, it did so clod together, as that the seeds which were sowed the 26 of *March* did not appear above ground until the latter end of *May*, and then also they came very thinly. I had the like success in the same earth with *Artichoke* seeds, whereof the hundredth one came not up (although peradventure I might be abused in the seeds, which is an ordinary practice in these days, with all such as follow that way, either to deliver the seeds which they sell mingled with such as are old and withered, or else without any mingling at all to sell such as are stark naught) I would there were some fit punishment devised for these petit coseners, by whose means

means many poor men in England, do oftentimes lose, not only the charge of their seed, but the whole use & benefit of their ground; after they have bestowed the best part of their wealth upon it. Cheapside is as full of these lying and forswearing Huswiyes as the Shambles and Gracechurch-street are of that shameless crew of Poulters wives, who both daily, & most damnable, yea upon the Sabath day it self, run headlong into wilful perjury, almost in every bargain which they make, selling Cocks for Capons when they have pared their combs, and broken off their spurs; old Hens for Pullets, when they have broken their pinions and brest-bones; Bunting for Larks,

Larks, when young Dames go to market, bruised Rabbits for sound, being in their skins, and yet they will have their Cases too except the bагain be the wiser made, and stale Fowl for fresh and new, or at the least both sorts mingled together, maintaining their sales with such bold countenances, and cutting speeches, with such knavish practices, and such forlorn Consciences, as that they have both driven away many honest Matrons from their stals, and so corrupted a number of young maiden Servants with their bold and lewd lying, with their desperate swearing and forswearing, that they have made all plain and modest speech, yea all kind of Christianity

anity to seem base and rustical unto them. I would inveigh more bitterly against this sin, if my text would bear it; but now I will leave it unto the several Preachers of the Parishes where they dwel, who can present this matter more sharply, and with less offence then I may; I pray God, that either by them, or by the Magistrate, or by one means or other, this great dishonor of God and of Religion may be speedily removed amongst us. But to return to our first subject, I think it very necessary to sow as early as the coldness of the Spring will give you leave. I sowed Anni'eeds and Fenigreke the 26 of *March*, 1594. and they prospered exceeding well, and yet I would have

K 3 sowed

sowed more early, but that the beginning of *March* was so showring, that I could not garden any sooner; these *Anniseeds* began to flower about the midst of *June*, at which time also the *Fenigreke* was full of cods. *Quare* if the *Staves acre*, *Artichoke*-seeds, and *Comin*-seeds which I then sowed also, would not have proved better if they had been steeped for some reasonable time in water. I do finde by experience that *Anniseeds* and *Fenigreke* delight in ground that is enriched with *Sope* ashes; and *Cominseed*, as I think, would either be steeped in salt water before it be sowed, or else some little store of salt would be mingled in the earth, for I found it to fail

fail me in divers other trials which I made without salt ; and yet if I had not over-salted the ground, I think it would have proved much better. *Quere* of ground enriched with horn for outlandish seeds, because I have been credibly informed that they will make Parsely seeds to disclose themselves in three weeks. In March 1595. I sowed English Wormseeds (a seed much like if it be not the same, to that which is called *Semen Ameds*) in ground enriched with horn, and it grew very ranck , and full of blossoms.

96. *A necessary observation in the removing of young Plants of Musk-mellons, Pompeons &c.*

The younger that you set
K 4 them

them, being strong enough to be removed, I think they will prosper the better; for the sap will sooner rise, and be able to feed them.

97. *How to graff upon one root of Carnations all manner of Carnations, Gilliflowers, Pinks, &c.*

Pull off the top (some two or three inches in length) of every branch, and in their places put the like tops of flowers of contrary colours, thrusting them in as clos as you can, and then bind them about with some thred, and they will bring forth the like flowers as those roots did bear from whence they were taken. This of Mr. Farret the Chy-rurgeon in Holborn.

98. How to encrease the bearing
of any Gilliflower or Carna-
tion root exceedingly.

Wreath every stalk a little
in that place which you mean
to cover with earth, then
lay your earth thereon, and
by this means every Slip will
bring forth great store of
Flowers. You may also
dwarf them into little pots,
being slit on the sides, and
when they have taken suffi-
cient root, you may cut them
off from the old root, and so
of every slip you shall have a
bearing root the same year.
This also of Mr. Farret the
Chyrurgeon.

99. How

99. *How to encrease the double or single Stock-Gilliflowers.*

Nip off the tops of them before they bud, at some reasonable length, and beat the stalk toward the bottom with the back of a knife, and then prick them into the ground, and close the earth well unto them. I have heard that the double Stock-gilliflower doth never yield any seed.

100. *How to dwarf any manner of Frnit Tree, so as your Orchard shall bear frnit the first year.*

In the beginning of *Janu-
ary*, or at the least before the same moneth expired, chuse a shoot

shoot of two years old, and if you can such a one as hath some small sprigs about that part of the branch which shall rest in the midst of the pot, for they help greatly in the rooting; then cross-hack near those sprigs, about some two inches in length round about the bark with the edge of your knife, and then let it in at a slit, which of purpose must be made in the pot, wherein you mean to dwarf; fill the same full of earth, and if occasion serve, now and then you may water the same; hang this pot either by wiers firm to the body of the tree, or else drive in a stake near the shoot and place your pot thereon, and let the same continue one whole year before you cut it off.

off from the old Tree. Note that the aptest pots for this purpose be such as hold sugar loaves, having flats of an inch in bigness at one side thereof from the bottom to the very top, and having feet made unto them whereon they may stand (wherein they differ from the sugar pots) and it will not be amiss if these pots consist of two parts, whereby you may take them from the earth, without breaking of the earth, when you would plant them in the ground ; and so the same pots will serve often. These Dwarf-trees will bear fruit the first year. See *ante num. 83.* how to defend such an Orchard in blooming time from frosts. Also if these Trees be set in ranks, the Walks

Walks being well gravelled, leaving onely round rings of earth about the bodies of each, of six inches in breadth, where you may place some straw or fern if you fear the exceeding heat of Sol; by this means the Sun will make a strong reflection upon the fruit to procure a speedy ripening.

Quare of adding the gelly of horn dissolved in lime-water to the roots of them to make them more forward. *Quare* of lapping of thin sheet-lead upon the bodies of your Trees to enforce the heat of the sun upon them: You may chuse such a plat for this purpose, as is either naturally or artificially defended from the North and East winds, by hills, walls, pails, or hedges, but

but so as the Sun be not kept also from them.

101. *How to multiply the double Honeysuckle, Fesamie.*

Lay a number of their stalks or brances in the earth, and each sprig will become a root the next year, and so you may store your self of any slender Plant, either to sell or give to your friends, and by this means you may make one root to run at what length you please in time, laying the shoot into the earth, as it groweth to any reasonable length.

102. *How to have a Vineyard to bear Grapes the first year.*

Let such shoots as are most likely

likely to bear Grapes, run through the sides of pretty big baskets, opening the twigs to make passage for the branches, and filling the baskets full of earth in cutting time.

There, if there need to be any wreathing of the branch, or hacking of the bark as before, *num. 100.* in the dwarfing of Trees to make them root the sooner; These baskets may afterwards be placed in any plat where you mean to make a Vineyard, and they will bear the first year; the reason is apparent. Note if your Vine whereon you dwarf do run upon a frame, then you may easily place the basket upon the frame; and if they run upon a wall, then may you hang the

the basket by the ears to the wall. Some do use pots with holes bored through both the sides of them ; But I do hold the baskets the better way, because they will soon rot being put into the ground, whereby the earth needeth not to be loosened from the roots, neither will they take so strong a heat in the Summer time to parch them away before they be fully rooted, as the stone pot will do.

103. *How to graff in a dead trunck, or stock of a Willow-tree.*

Put a Willow-stock, (square if it must not be green and fresh) into a furrow of earth made for that purpose, make

make clefts or slits in the same fit for such branches of the Mulberry-tree as you will graff therein ; they must be made like wedges, joyning sap to sap, then close up the clifts and defend them from weather, and then put all the stock of the willow under the furrow ; this is borrowed out of *Celsus*. And one skilful in planting told me that no Tree will perish that is planted in this manner. After the first & second year past thou mayst also saw or cut the trunk in sunder between the Plants, and transplant them in places convenient. *Ex veteri lib. manuscip. Th. Gafc.*

104. *To help a tree whose flock or fruit beginneth to rot.*

When this happeneth, it is a sign that the bark of the Tree is sick, and therefore slit the same with a knife; and when the bad humor is sufficiently spent, dung the Tree well, and close the wood with tempered clay. *Ibid.*

105. *That the Peach-stone may have no kernel.*

Graff a Cions of a Peach-tree upon a Nut-tree. *Ibid.*

106. *To make a Peach-tree bring forth Pomegranates.*

Water the same with Goats milk

milk three days together, when it beginneth to flower.
Ibid. *Quis hoc credit nisi sit proteste vetustas?*

107. *To have great store of Sage speedily.*

A Monk told me that if thou sow the seed of Sage well ripe, as thou sowest other seeds in good earth that it will multiply exceedingly. *Ibid.*

108. *To have several grapes growing upon one branch, and and so of Roses, Gilliflowers, &c.*

Plant a white and a red Vine close together, and being both rooted, set a branch of either of them together in the

L 2 top

top, sloping them upward unto the pith; joyn them sap to sap, binde them together, wrapping a supple linnen cloth about them, and at three days end, moisten them with water till it burgeon. *Quere*, if after a convenient time one of the roots may not be taken away, to make it seem the more strange. *Quere* if this may not also be performed in other Fruit-trees, Roses, Gil-liflowers, &c. *Ibid.*

109. *How to have trees of Time, Hysop, Lavender, Rosemary, &c.*

Quere if by some one or other of the ways of grafting, the same may not be performed. *Rocella, ruta, & caules in arbores*

arbores mutantur; teste Cardano in lib. de rer. variet. p. 225.

110. How to keep Grapes upon the Vine till the Calends of January; and so of other fruit and flowers; as also to keep backward both fruit and flowers.

Servantur in arbore, sacculo ex papiro nostra circumposito.
Card. in lib. de variet. rer. 224.

Quare, if an oiled paper will not perform this; especially if the paper be oiled over often, as occasion serveth, and the thred also oiled with it. *Quare* also, if oyled papers, especial ly two or three double, or more, will not keep any fruit backward by defending the Sun from it, but then it will

L. 3 be

be necessary (as I think) to give some vent by pin-holes underneath, least the heat of the Sun do burn up the fruit, and work a distillation upon it; let the thred also be well oyled or waxed, wherewith you tye your paper; If Lin-feed-oyl alone will not serve, mix some powdred Amber therewith in the boiling, according to that set down in my Book of Experiments; for this is an excellent secret, and to be applied many ways if it be true, and it seemeth very probable. This is a delicate device to defend Gilliflower pots in winter from the cold, and in Summer from the heat. *There*, if a Bladder will not serve instead of an oiled paper. *There*, if taking away the

the bark almost round, or round, when the fruit is near ripe.

111. *How to make Pears, Apples, Plums, Grapes, &c. to dry as they grow.*

Before they be fully ripe, wreath the stalk of every fruit, by this means the fruit wanting nourishment will grow dry as it hangeth on the Trees.
Ex veter. lib. manuscrip. Th. Gasco. Quare of taking away the bark round about the branches that bear the fruit.

112. *How to destroy Caterpillers.*

Make a ring of tar towards the bottom of the Tree, then hang a bag full of Pismires by

a cord in the top of the Tree, so as they may easily get out, and the Ants when they cannot get down by reason of the tar, rather then they will starve for hunger, will eat up all the Caterpil'ers, *per Lupton. 282.*

113. *Secrets in Pompeons, Musk-mellons, Strawberries, and Artichokes, to make them prosper and grow great.*

Temper fat mold with cream, and therein prick your Pompeon-seeds, the mold being in a pot or earthen pan; cover them in the night and in cold weather; and when it is warm, or during the sun-shine uncover them, and when they are sufficiently sprung up to make

make plants of, remove them into good ground, and they will grow to a monstrous greatness. *Probat. per Sir Tho. Challenor.* Quare if the same practice will not serve in Musk-mellons, Beans, Pease, &c. The water wherein sheeps dung hath been infused, will make Strawberries very great. And the Hoze of Tanners well rotted in good earth will make rich ground to plant Artichoke plants in ; and when you have set your young plants, if you strein a canvas over them, uncovering them onely in warm weather, and in the warmest part of the day, they will prosper exceedingly.

114. *To make Apricocks to prosper well.*

Plant them against a wall that standeth into the East, and on either side of the Tree place a Fir-pole that is somewhat higher then the Tree, sloping wise; on the top of the poles place a coarse cloth, or rather a Sear-cloth, which in the day time, or in the warmth of the day may be rolled up, or in the night or in cold weather let down to cover all the Tree, as it were with a Pent-house; and in this manner your Tree will prosper exceedingly; these clothes do also serve to keep off the frosts or cold winds when they are in blossom, until the fruit be knit.

knit, at which time you must onely unfold your clothes in the warmth of the day, or when the Sun shineth, if the wind happen to be in any cold corner. A wooden pale may also serve instead of a brick-wall for the like purpose. This of *And. Hill.*

115. *To make Rosemary to prosper exceedingly.*

Take of the dirt of the Highways, especially in the midst of them, where cattel have dunged and stalled most, make a bed thereof, and therein plant your Rosemary. *Quare* of all other plants and flowers. *Probat. per Mr. And. Hill* in Rosemary, which he could never have to prosper in his

London

London Garden till he used
this Experiment.

216. To make trees to flourish
wonderfully.

Water them now and then
with the Dregs of Beer or
Ale. Per Mr. And. Hill. Quare
of applying the same to all
Herbs and Flowers. Quare
of Saltpeter, or Sal Armoni-
ack applied to the roots of
Plants, being first well putri-
fied or rooted in earth.

217. How to make a clay ground
fruitful.

This is done by mixing of
a reasonable proportion of
sand with it, not that the
sand giveth any strength to
the ground, but that it open-
eth

eth the clay, which is often-times so binding, that the grain is starved therein before it can break out: specially in a dry season.

118. *Certain Observations for the enriching of ground.*

The River of Trent in Lincolnshire is suffered once in seven years to overflow a great Marsh, whereby it carrieth as much Swarth as can stand upon the ground: *Per Harsley* my Neighbor at Bishops-hall.

A Gentleman having his Stable near his Vine, had his Grapes exceeding great and pleasant, by reason of the stale of his Horses, that descended from his Stable to his Vine, and after turning his Stable into Lodgings

Watering
of Grapes.

Lodgings, the Vine began to starve, and brought forth poor and hungry grapes. *Per And. Hill.*

A Western Gentleman by direction of my Book of Husbandry, steeped two years together his Barley for twelve hours in the Sea-water, and then sowed the same, *an. 1595* and *1596*. and had a very plentiful crop. *Quere* what soil. This of Mr. *Andrew Hill.*

By my *Cofin Duncombe*, a neighbor of his steeped his Wheat in stale four and twenty hours, and sowed the same in a ground consisting of sand and lome, being very barren, and had great yield, *anno 1596.*

The Gall of a beast applied to

to a young grafted Plant, maketh the same to shoot forward exceedingly; *quare* of Allom mixed with the gall; for one of these ways Mr. *And. Hill* proved excellent. Hereupon I gather, That all offal of Beasts, and all garbage of fish is very good.

FINIS.

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